

ADA072032

USAFETAC/DS-79/021

ADA072032

DATA PROCESSING DIVISION  
USAFETAC  
Air Weather Service ( MAC )

REVISED UNIFORM SUMMARY OF  
SURFACE WEATHER OBSERVATIONS

LUKE AFB ARIZONA/PHOENIX  
N 33 32 W 112 23

ELEV 1121 FT KLUF

WBAN# 23111  
WMO#

PARTS 4-F

POR FROM HOURLY OBS: DEC 41-FEB 46, APR-NOV 46, APR 51-JUL 72  
POR FROM DAILY OBS: DEC 41-FEB 46, APR-NOV 46, APR 51-JUL 72

MAR 12 1974

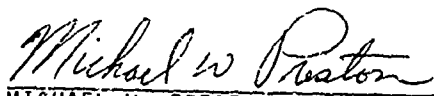
FEDERAL BUILDING THIS DOCUMENT HAS BEEN APPROVED  
ASHEVILLE, N. C. FOR PUBLIC RELEASE AND SALE; ITS  
DISTRIBUTION IS UNLIMITED.

79 07 30 116

Review and Approval Statement

This report is approved for public release. There is no objection to unlimited distribution of this report to the public at large, or by DDC to the National Technical Information Service (NTIS).

This technical report has been reviewed and is approved for publication.



MICHAEL W. PRESTON, SMS, USAF  
NCOIC, Climatological Services Branch

FOR THE COMMANDER



WALTER S. BURGMAN  
Scientific & Technical  
Information Officer

## **DISCLAIMER NOTICE**

**THIS DOCUMENT IS BEST QUALITY  
PRACTICABLE. THE COPY FURNISHED  
TO DDC CONTAINED A SIGNIFICANT  
NUMBER OF PAGES WHICH DO NOT  
REPRODUCE LEGIBLY.**

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM															
1. REPORT NUMBER USAFETAC/DS- 79/021	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER															
4. TITLE (and Subtitle) Revised Uniform Summary of Surface Weather Observations (RUSSWO)- Luke AFB Phoenix, Arizona		5. TYPE OF REPORT & PERIOD COVERED Final rept.															
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER															
9. PERFORMING ORGANIZATION NAME AND ADDRESS USAFETAC/OL-A Air Force Environmental Technical Appl. Center Scott AFB IL 62225		8. CONTRACT OR GRANT NUMBER(s)															
11. CONTROLLING OFFICE NAME AND ADDRESS USAFETAC/CBD Air Weather Service (MAC) Scott AFB IL 62225		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS															
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE 13 Mar 74															
		13. NUMBER OF PAGES 514 p.															
		15. SECURITY CLASS. (of this report) UNCLASSIFIED															
16. DISTRIBUTION STATEMENT (of this Report)  Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE															
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)																	
18. SUPPLEMENTARY NOTES																	
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) <table border="0"> <tr> <td>*RUSSWO</td> <td>Daily temperature</td> <td>Atmospheric pressure</td> </tr> <tr> <td>Snowfall</td> <td>Extreme snow depth</td> <td>Extreme surface winds</td> </tr> <tr> <td>Climatology</td> <td>Sea-level pressure</td> <td>Psychrometric summary</td> </tr> <tr> <td>Surface Winds</td> <td>Extreme temperature</td> <td>Ceiling versus visibility</td> </tr> <tr> <td>Relative humidity</td> <td>*Climatological data</td> <td>(over)</td> </tr> </table>			*RUSSWO	Daily temperature	Atmospheric pressure	Snowfall	Extreme snow depth	Extreme surface winds	Climatology	Sea-level pressure	Psychrometric summary	Surface Winds	Extreme temperature	Ceiling versus visibility	Relative humidity	*Climatological data	(over)
*RUSSWO	Daily temperature	Atmospheric pressure															
Snowfall	Extreme snow depth	Extreme surface winds															
Climatology	Sea-level pressure	Psychrometric summary															
Surface Winds	Extreme temperature	Ceiling versus visibility															
Relative humidity	*Climatological data	(over)															
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report is a six-part statistical summary of surface weather observations for Luke AFB, Phoenix, Arizona It contains the following parts: (A) Weather Conditions; Atmospheric Phenomena; (B) Precipitation, Snowfall and Snow Depth (daily amounts and extreme values); (C) Surface winds; (D) Ceiling Versus Visibility; Sky Cover; (E) Psychrometric Summaries (daily maximum and minimum temperatures, extreme maximum and minimum temperatures, psychrometric summary of wet-bulb temperature depression versus dry-bulb temperature, means and standard deviations of dry-bulb, wet-bulb (over))																	

DD FORM 1 JAN 73 1473

UNCLASSIFIED



UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

19. Percentqge frequency of distribution tables  
Dry-bulb temperature versus wet-bulb temperature  
Cumulative percentage frequency of distribution tables

\* Arizona

\* Luke AFB AZ

20. and dew-point temperatures and relative humidity); and (F) Pressure  
Summary (means, standard, deviations, and observation counts of  
station pressure and sea-level pressure). Data in this report are  
presented in tabular form, in most cases in percentage frequency of  
occurrence or cumulative percentage frequency of occurrence tables.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

DATA PROCESSING DIVISION  
USAFETAC OL-1  
AIR WEATHER SERVICE (MAC)

## REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS

### HOURLY OBSERVATIONS

Hourly observations are defined as those record or record-special observations recorded at scheduled hourly intervals.

### DAILY OBSERVATIONS

Daily observations are selected from all data recorded on reporting forms and combined into Summary of the Day observations. (Selected from record-special, local, summary of the day, remarks, etc.)

### DESCRIPTION OF SUMMARIES

Preceding each section is a brief description of the data comprising each part of the Revised Uniform Summary of Surface Weather Observations and the manner of presentation. Tabulations are prepared from hourly and daily observations recorded by stations operated by the U. S. Services and some foreign stations using similar reporting practices.

Unless otherwise noted the following summaries are included for this station:

#### PART A WEATHER CONDITIONS

ATMOSPHERIC PHENOMENA

#### PART B PRECIPITATION

SNOWFALL

SNOW DEPTH

#### PART C SURFACE WINDS

#### PART D CEILING VERSUS VISIBILITY

SKYCOVER

#### PART E DAILY MAX, MIN, & MEAN TEMP

EXTREME MAX & MIN TEMP

PSYCHROMETRIC-DRY VS WET BULB

MEAN & STD DEV -  
(DRY BULB, WET BULB, & DEW POINT)

RELATIVE HUMIDITY

#### PART F STATION PRESSURE

SEA LEVEL PRESSURE

### STANDARD 3-HOUR GROUPS

All summaries requiring diurnal variations are summarized in eight 3-hour periods corresponding to the following set of hourly observations: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 hours local standard time.

### MISSING HOUR GROUPS

Summary sheets are omitted when stations maintaining limited observing schedules did not report certain three-hour periods for any particular month during the available period of record. Such missing sheets are listed below, and are applicable to all summaries prepared from hourly observations.

JANUARY \_\_\_\_\_

APRIL \_\_\_\_\_

JULY \_\_\_\_\_

OCTOBER \_\_\_\_\_

FEBRUARY \_\_\_\_\_

MAY \_\_\_\_\_

AUGUST \_\_\_\_\_

NOVEMBER \_\_\_\_\_

MARCH \_\_\_\_\_

JUNE \_\_\_\_\_

SEPTEMBER \_\_\_\_\_

DECEMBER \_\_\_\_\_

STATION NO ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
23111		LUKE AFB ARIZONA/PHOENIX		N 33 32		W 112 23		1121		KLUK			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			STATION (FT)	BAROMETER					
1	Luke Field Arizona	AAF	Dec 41	Nov 46	N 33 32	W 112 22	1092	1095Ft	24				
2	Luke AFB Arizona	AFB	Apr 51	Feb 53	Same	Same	Same	Same	24				
3	Same	Same	Mar 53	Mar 55	N 33 30	Same	1116	1093Ft	24				
4	Same	Same	Apr 55	Feb 58	Same	Same	Same	Same	24				
5	Same	Same	Mar 58	19 Mar 62	N 33 32	W 112 23	1121	Same	24				
6	Same	Same	20 Mar 62	Jul 72	Same	Same	Same	1087Ft	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1	Dec 41to Apr 43	Located in N half of Bldg 27-2.	Anemometer	N/A	20 Ft	
2	May 43to Nov 46	Same Bldg T-439	Selsyn	ML-144	Same	
3	Apr 51to 28 Mar 54	Located on platform on Weather Station.	AN/GMQ-1	N/A	33 Ft	
4	29 Mar 54to Feb 58	Located on top of Operations Bldg.	Same	N/A	29 Ft	
5	Mar 58to Feb 59	Located on top of Control Tower.	Same	N/A	75 Ft	
6	Mar 59to Feb 61	Located 1000 ft N of Control Tower.	AN/GMQ-11	RO-2	10 Ft	



DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAC)  
ASHEVILLE, NORTH CAROLINA

## PART A

## WEATHER CONDITIONS

This summary is a percentage frequency occurrence of various atmospheric phenomena and obstructions to vision, derived from hourly observations, and is presented in two tables as follows:

1. By month and annual, all hours and years combined.
2. By month, all years combined, by standard 3-hour groups.

Occurrences of the various phenomena included in each category on the forms are listed below:

Thunderstorms - All reported occurrences of thunderstorm, tornado, and waterspout.

Rain and/or drizzle - All liquid precipitation, falling to the ground, not freezing.

Freezing rain and/or freezing drizzle (glaze) - Precipitation falling in liquid form, but freezing on contact with an unheated surface.

Snow and/or sleet - Included are snow, sleet, snow pellets (soft hail), snow grains, and ice crystals.

Hail - Occurrences of hail and small hail are included.

Percentage of observations with precipitation - Included in this category are the observations when one or more of the above phenomena occurred. Since more than one type of precipitation may be reported in the same observation, the sums of the individual categories may exceed the total columns.

Fog - Included are fog, ice fog, and ground fog.

Smoke and/or haze - Occurrences of smoke, haze, or combinations of smoke and haze are included.

Blowing snow - Occurrences of blowing snow (also drifting snow when reported from non-WEAN sources.)

Dust and/or sand - Included are blowing dust, blowing sand, and dust.

Blowing spray - This item if reported, is not shown in a separate category on this form but is included in the computation Percentage of Observations with Obstructions to Vision, below.

Percentage of observations with obstructions to vision - Included in this category are the observations when one or more of the above obstructions to vision occurred. Since more than one type of obstruction may be reported in the same observation, the sums of the individual categories may exceed the percentage total columns. Also, although precipitation may reduce visibility, it is not considered an obstruction to vision for purposes of this summary; therefore, the percentage total of obstructions to vision need not reflect the total observations with reduced visibility.

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 41-46,51-72 ALL  
STATION STATION NAME YEARS MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS
JAN	ALL	.0	3.0		.0		3.0	1.1	.8		.1	1.9	19200
FEB		.1	2.5			.0	2.5	.3	.2		.2	.6	17093
MAR		.1	2.3				2.3	.2	.1		.2	.5	15500
APR		.1	1.1				1.1		.1		.2	.3	18939
MAY		.0	.4				.4	.0	.0		.1	.2	19960
JUN		.3	.3				.3		.1		.3	.4	19066
JUL		1.2	1.9				1.9	.0	.1		.7	.8	19804
AUG		1.9	2.5				2.5	.1	.1		.7	.8	19312
SEP		.6	1.5			.0	1.5	.0	.0		.3	.4	18690
OCT		.2	1.4				1.4	.1	.1		.2	.4	19309
NOV		.1	1.7				1.7	.3	.5		.1	.9	18321
DEC		.1	3.1		.0	.0	3.2	1.1	1.1		.0	2.1	19268
TOTALS		.4	1.8		.0	.0	1.8	.3	.3		.3	.8	227470

DATA PROCESSING NO. 1  
USAF ETAC  
AIR WEATHER SERVICE/AC

## WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,52-72 JAN  
STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER  
CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN.	00-02		2.8				2.8	.6	.1		.1	.9	2393
	03-05	.0	2.9		.0		2.9	1.5	.3		.1	1.7	2405
	06-08		3.3		.0		3.3	1.8	.7			2.4	2405
	09-11		3.3		.0		3.3	2.0	1.7		.1	3.7	2397
	12-14		2.6				2.6	1.0	2.4			3.3	2404
	15-17	.1	3.2				3.2	.7	.8			1.5	2403
	18-20	.0	2.9				2.9	.6	.3			.9	2400
	21-23		2.7		.0		2.7	.6	.2		.1	.9	2393
TOTALS		.1	3.0		.0		3.0	1.1	.8		.1	1.9	19200



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,52-72 FEB  
STATION STATION NAME YEARS MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
FEB	00-02		2,7				2,7	.1	.0		.2	.4	2136
	03-05	.0	2,3				2,3	.3			.0	.3	2136
	06-08	.0	2,3				2,3	.5	.2		.1	.8	2134
	09-11		2,0				2,0	.2	.5		.2	.9	2136
	12-14	.2	2,6			.0	2,6	.2	.3		.2	.7	2136
	15-17	.3	3,0				3,0	.2	.2		.4	.8	2130
	18-20	.1	2,9				2,9	.3	.1		.3	.7	2141
	21-23		2,5				2,5	.3	.1			.4	2144
TOTALS		.1	2,5			.0	2,5	.3	.2		.2	.6	17093

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

## WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-45, 52-72 MAR  
STATION STATION NAME YEARS MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAR	00-02	.0	2.1				2.1				.1	.1	2312
	03-05	.1	2.0				2.0	.2	.1		.0	.3	2311
	06-08	.1	2.3				2.3	.6	.1		.1	.8	2316
	09-11	.1	2.2				2.2	.5	.1		.2	.7	2316
	12-14	.2	2.7				2.7	.2	.2		.7	1.1	2310
	15-17	.1	2.4				2.4				.6	.6	2311
	18-20	.2	2.6				2.6				.1	.1	2311
	21-23		2.0				2.0				.1	.1	2313
TOTALS		.1	2.3				2.3	.2	.1		.2	.5	18500

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/PAC

# WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-72 APR  
STATION STATION NAME YEARS MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
APR	00-02		.7				.7		.1		.0	.2	2365
	03-05	.0	.8				.8		.1			.1	2365
	06-08	.0	1.4				1.4		.2		.0	.3	2366
	09-11		1.6				1.6		.2		.1	.3	2366
	12-14	.1	1.4				1.4		.1		.3	.4	2364
	15-17	.1	.9				.9		.0		.8	.8	2362
	18-20	.3	1.2				1.2		.0		.5	.6	2362
	21-23		1.1				1.1				.0	.0	2369
TOTALS		.1	1.1				1.1		.1		.2	.3	18919

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

# WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-72 MAY  
STATION STATION NAME YEARS MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAY	00-02		.4				.4				.1	.1	2500
	03-05	.1	.4				.4	.0				.0	2499
	06-08		.1				.1	.1				.1	2494
	09-11	.0	.2				.2		.0			.0	2492
	12-14		.2				.2		.0		.2	.2	2497
	15-17	.1	.3				.3		.2		.4	.6	2494
	18-20	.1	.6				.6		.0		.4	.4	2498
	21-23		.6				.6				.0	.0	2494
TOTALS		.0	.4				.4	.0	.0		.1	.2	19968

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

42-46,55-72

JUN

STATION

STATION NAME

YEARS

MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUN	00-02	.3	.5				.5				.1	.1	2383
	03-05	.1	.3				.3				.1	.1	2382
	06-08	.1	.2				.2		.0		.0	.1	2382
	09-11	.2	.3				.3		.2		.1	.3	2382
	12-14	.2	.1				.1		.2		.2	.4	2382
	15-17	.5	.3				.3		.1		.3	.4	2386
	18-20	.3	.3				.3				1.0	1.0	2384
	21-23	.3	.3				.3				.6	.6	2385
TOTALS		.3	.3				.3		.1		.3	.4	19066

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

STATION

STATION NAME

YEARS

MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS
JUL	00-02	2.4	3.8				3.8				.7	.7	2442
	03-05	1.0	2.1				2.1				.2	.2	2413
	06-08	.3	1.3				1.3	.0	.2		.1	.4	2491
	09-11	.1	1.0				1.0		.4		.1	.5	2484
	12-14	.2	.8				.8		.1		.1	.2	2494
	15-17	.2	.4				.4				.6	.6	2494
	18-20	1.6	2.3				2.3				2.2	2.2	2489
	21-23	4.1	3.5				3.5				1.7	1.7	2497
TOTALS		1.2	1.9				1.9	.0	.1		.7	.8	19804

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/ETAC

## WEATHER CONDITIONS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-71 AUG  
STATION STATION NAME YEARS MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
AUG	00-02	3,6	4,6				4,6	,2			,6	,8	2414
	03-05	1,6	2,7				2,7	,2			,3	,5	2411
	06-08	,7	2,1				2,1	,1	,2		,1	,4	2410
	09-11	,5	1,2				1,2		,1		,1	,2	2415
	12-14	,3	1,0				1,0		,1		,0	,1	2416
	15-17	,7	,9				,9				,9	,9	2416
	18-20	2,0	2,3				2,3	,0			1,9	2,0	2415
	21-23	4,1	5,1				5,1	,0	,0		1,6	1,7	2415
TOTALS		1,9	2,5				2,5	,1	,1		,7	,8	19312

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

STATION

STATION NAME

YEARS

MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS
SEP	00-02	.7	1.7				1.7				.2	.2	2338
	03-05	.7	1.6				1.8	.0				.0	2335
	06-08	.4	1.7				1.7	.3			.1	.4	2337
	09-11	.4	1.0				1.0	.0	.0		.1	.2	2337
	12-14	.2	1.2			.0	1.2	.0	.0		.1	.2	2334
	15-17	.6	1.4				1.4				.6	.6	2336
	18-20	.9	1.5				1.5				.8	.8	2335
	21-23	1.1	1.9				1.9		.0		.5	.6	2338
TOTALS		.6	1.5			.0	1.5	.0	.0		.3	.4	18690



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

DCT

STATION

STATION NAME

YEARS

MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS.
UCT	00-02	.2	1.6				1.6	.1				.1	2415
	03-05	.3	1.5				1.5	.0	.1			.1	2413
	06-08	.1	1.4				1.4	.2			.2	.4	2414
	09-11		1.2				1.2	.2	.2		.5	.9	2412
	12-14	.2	1.2				1.2	.1	.1		.3	.5	2412
	15-17	.3	1.2				1.2		.1		.5	.6	2414
	18-20	.3	1.2				1.2	.1			.3	.5	2413
	21-23	.3	1.9				1.9	.1			.0	.1	2416
TOTALS		.2	1.4				1.4	.1	.1		.2	.4	19309

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

NOV

STATION

STATION NAME

YEARS

MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS
NOV	00-02	.0	1.6				1.6	.3	.4		.1	.8	2293
	03-05	.2	2.0				2.0	.3	.3			.7	2292
	06-08	.1	1.8				1.8	.5	.5			1.0	2291
	09-11	.0	2.1				2.1	.5	.8		.0	1.1	2291
	12-14	.0	1.8				1.8	.4	.5		.3	1.2	2288
	15-17	.1	1.4				1.4	.2	.5		.2	1.0	2285
	18-20	.0	1.2				1.2	.2	.3		.2	.7	2290
	21-23	.2	1.4				1.4	.2	.4		.1	.8	2291
TOTALS		.1	1.7				1.7	.3	.5		.1	.9	18321

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## WEATHER CONDITIONS

23111

LUKE AFB ARIZONA/PHOENIX

41-45, 51-71

DEC

STATION

STATION NAME

YEARS

MONTH

### PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
DEC	00-02	.0	2.0		.1		3.1	.9	.4			1.2	2409
	03-05	.0	3.6				3.6	1.4	.6			1.9	2411
	06-08	.1	3.1		.0		3.1	1.8	.9			2.4	2413
	09-11	.1	2.8			.0	2.8	1.5	1.7		.0	3.1	2409
	12-14		3.7				3.7	1.0	1.7			2.7	2411
	15-17	.1	3.3				3.3	1.0	1.6			2.6	2414
	18-20	.1	2.7				2.7	.3	1.0		.0	1.6	2410
	21-23	.0	2.9				2.9	.3	.6			.9	2411
TOTALS		.1	3.1		.0	.0	3.2	1.1	1.1		.0	2.1	19288

## PART A

## ATMOSPHERIC PHENOMENA

This summary is a presentation of the percentage of days with occurrences of various atmospheric phenomena. These data are obtained from all recorded information on the reporting forms and combined into a daily observation.

The descriptions of the phenomena in the Weather Conditions Summary above also apply for the categories summarized in these tabulations. However, it should be noted that in this summary the columns headed "% OF OBS WITH PRECIP" and "% OF OBS WITH OBST TO VISION" show the percentage of days rather than percentage of observations. Since more than one type of precipitation or more than one type of obstruction may occur in the same daily observation, the sum of the values in the individual columns may not equal the total columns.

This presentation is by month with annual totals, and is prepared with all years combined.

NOTE: A day with rain and/or drizzle was not separately reported in WBAN data prior to January 1949. Therefore percentages in this column are restricted to the period January 1949 and later.

A day with dust and/or sand was punched and included in this summary only when visibility was less than 5/8 mile.

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
WEATHER CONDITIONS  
ATMOSPHERIC PHENOMENA

23111 LUKE AFB ARIZONA/PHOENIX 46, 51-72 ALL  
STATION STATION NAME YEARS MONTH

PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA  
FROM DAILY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN &/OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	DAILY	.4	14.4		.1	.1	14.8	5.0	4.8		.1	8.9	682
FEB		2.0	13.6		.2	.5	13.8	1.6	1.6		.7	3.6	608
MAR		1.5	13.5			.6	13.5	2.0	1.1		.6	3.4	651
APR		.7	10.0			.1	1.4	.1	1.3		1.6	3.1	673
MAY		1.3	6.4			.1	6.1	.3	.7		.9	1.9	690
JUN		4.3	6.5				6.2		.9		1.7	2.6	690
JUL		20.9	26.0			.3	26.1	.3	1.2		8.4	9.5	681
AUG		25.4	32.7			.4	32.8	.6	.9		8.2	9.4	680
SEP		10.0	14.0			.2	14.5	.5	.5		2.0	3.0	660
OCT		3.7	10.8			.3	11.2	.9	.9		.7	2.2	631
NOV		1.7	13.3				13.8	2.2	3.3		.6	5.1	645
DEC		1.2	16.3		.6	.2	16.3	5.8	5.4			9.5	651
TOTALS		6.1	14.8		.1	.2	15.0	1.7	1.9		2.1	5.2	7992

DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAO)  
ASHEVILLE, NORTH CAROLINA

## PART B PRECIPITATION, SNOWFALL & SNOW DEPTH

This portion of the Uniform Summary presents in two sets of tables, the daily amounts and extreme values of the following:

PRECIPITATION

DERIVED FROM DAILY OBSERVATIONS

SNOWFALL\*

DERIVED FROM DAILY OBSERVATIONS

SNOW DEPTH

DERIVED FROM DAILY OBSERVATIONS

1. The first table for each of the above presents the percentage frequency of various daily amounts, by month and annual, all years combined. The percentage of days with measurable amounts is also computed monthly and annually. Also shown for the precipitation and snowfall tables, are the monthly mean amounts, annual mean amounts (sum of monthly mean amounts), and the extreme monthly amounts (greatest and least). The latter statistics above are not presented for the snow depth summary since they would have limited use and may be misleading.
2. The second set of tables for each of the above presents the extreme daily amounts by individual year and month for the entire period of record available. Also provided are the means and standard deviations for each month and annual (all months). The extremes for a month are not printed nor used in computations if one or more observations are missing.

NOTE: Snow depth was recorded and punched at various hours during the period available from U. S. operated stations. The periods and hours used in the snow depth summary vary by service and period as follows:

Air Force Stations	From beginning of record thru 1945	Snow depth at 0800 LST
	Jan 46-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT
U. S. Navy and Weather	From beginning of record thru Jun 52	Snow depth at 0030 GCT
Bureau Stations	Jul 52-May 57	Snow depth at 1230 GCT
	Jun 57-present	Snow depth at 1200 GCT

\* Hail was included in snowfall occurrence in the summary of the day observation prior to Jan 1956,  
~~which was not included in the summary of the day observation for Jan 1956.~~

414

MAC FORM 36c PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE GENERAL PURPOSE WORK SHEET ☆ U.S.GPO:1974-0-045-204/0

RUNWAY 03-21

PERCENT OF TIME WITH CROSS WIND COMPONENT												
LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10 KNOTS												
06-08	.3	.7	.8	.9	.2	.1	.1	.1	.0	.1	.2	.5
09-11	1.0	1.5	1.6	2.0	1.3	.6	.7	.7	1.6	1.3	1.0	1.0
12-14	1.6	3.6	3.8	3.1	2.2	1.0	.7	1.0	2.3	2.6	2.2	1.2
15-17	2.0	4.7	3.7	4.4	5.1	3.6	2.0	2.3	2.9	1.4	2.2	1.6
18-20	.6	2.3	4.0	4.1	3.3	2.5	5.3	7.3	1.5	1.0	1.0	.9
MEAN	1.1	2.6	3.2	3.3	2.4	1.6	1.4	1.7	1.8	1.3	1.3	1.0
ANNUAL MEAN	1.9											
15 KNOTS												
06-08	.1	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0
09-11	.5	.5	.7	.4	.3	.1	.1	.2	.3	.1	.2	.3
12-14	.6	1.1	1.3	1.0	.6	.1	.1	.2	.8	.8	.7	.4
15-17	.6	1.9	3.1	1.6	1.4	.4	.2	.7	.7	.3	.9	.4
18-20	.1	.2	1.5	1.4	1.0	.4	1.0	1.4	.6	.4	.3	.3
MEAN	.4	1.0	1.4	0.9	0.7	.2	0.3	0.5	0.5	0.3	0.4	0.3
ANNUAL MEAN	0.6											
25 KNOTS												
06-08	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
09-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12-14	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15-17	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
18-20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
MEAN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
ANNUAL MEAN	.0											

NOTE .1 = 1/10 of 1%

.0 = LESS THAN 1/10 OF 1% BUT GREATER THAN 0%

Project Completed  
14 Jan 76 for TAC/ARPD

GENERAL PURPOSE WORK SHEET

[illegible]



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# DAILY AMOUNTS

PERCENTAGE FREQUENCY OF  
PRECIPITATION  
(FROM DAILY OBSERVATIONS)

22111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION

STATION NAME

YEARS

PRECIP	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	01	02-05	06-10	11-25	26-50	51-100	101-250	251-500	501-1000	1001-2000	OVER 2000			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	01-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	85.3	4.8	.8	3.6	1.3	2.3	1.5	1.3	.1					9.9	775	.72	2.85	.00
FEB	84.5	5.0	.9	2.1	2.2	3.1	1.2	.7	.3					10.5	679	.61	2.09	TRACE
MAR	85.5	3.2	.5	1.8	1.5	2.5	1.9	1.0						19.3	775	.63	2.39	.00
APR	89.4	5.8	.5	1.8	.9	.6	.3	.8						4.9	780	.23	1.77	.00
MAY	94.3	3.7		.9	.6	.2	.1	.1						2.0	806	.08	.57	.00
JUN	93.8	4.4	.4	.5	.4	.1	.2	.1						1.7	810	.07	.78	.00
JUL	73.5	14.6	1.7	3.6	1.4	1.9	1.9	1.3	.1					11.9	837	.73	2.56	TRACE
AUG	58.0	15.7	2.4	3.9	3.0	2.8	1.7	1.5	.8	.1				16.3	744	1.24	8.40	.04
SEP	86.2	6.5	1.2	.9	.6	2.2	.9	.9	.5	.1				7.3	780	.84	4.01	.00
OCT	88.1	5.2	.5	2.0	1.2	1.1	1.0	.5	.4					6.7	806	.46	2.10	.00
NOV	86.7	5.5	.7	1.3	1.1	2.4	2.0	.4						7.9	750	.47	1.86	.00
DEC	83.3	6.0	.4	2.0	2.1	2.0	1.9	.9	.6					10.8	806	.87	4.97	.00
ANNUAL	84.9	6.9	.8	1.9	1.4	1.8	1.2	.8	.2	.0				8.3	9348	6.97		

DATA PROCESSING BRANCH  
USAF HETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

PRECIPITATION  
(FROM DAILY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-46, 51-72  
YEARS

## 24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
41												.44	
42	.40		.25	.90	.00	.00	.26	.19	.02	.16	TRACE	.24	
43		.03	.66	.02	TRACE	TRACE	.20	1.05	.65	.22	.00	.80	
44	.29	.84	.30	.06	.57	.00	1.90	.34	.38	.16	.35	.38	1.90
45	.01	.09	.35	TRACE	.00	.00	.42	.04	TRACE	.84	.00	.16	.84
46	.32			.04	.00	.00	.62	.04	1.88	.10			
51		.48	.15	.44	.69	.24	.00	.93	2.87	.12	1.44	.74	.35
52					.00	.07	.28	.23	.21	.00	.72	.28	.72
53	.14	.30	.26	TRACE	.08	TRACE	.56	.25	.00	TRACE	.12	.10	.56
54	2.17	.50	.79	.00	.08	.30	.24	.16	1.55	.08	.00	TRACE	2.17
55	.88	TRACE	.03	TRACE	TRACE	.78	.42	1.05	.00	.07	.16	.06	1.05
56	.15	.24	.00	TRACE	TRACE	.01	.09	.85	.01	1.01	.00	.02	1.01
57	.62	.19	.54	.58	.07	.12	.35	.08	.00	1.06	.44	.07	1.06
58	.02	1.49	.21	.40	.04	TRACE	.04	.14	1.81	.17	.36	.00	1.81
59	.04	.90	.00	.04	TRACE	.06	.52	.64	.12	.58	.38	.79	.92
60	.36	.07	.19	TRACE	.02	TRACE	.08	.68	.02	.28	.07	.05	.68
61	.14	TRACE	.16	TRACE	TRACE	TRACE	.70	.56	TRACE	.05	.01	1.25	1.25
62	.58	.13	.30	TRACE	.00	.01	.02	.37	.19	TRACE	.22	.29	.58
63	.26	1.02	.31	.14	TRACE	.00	TRACE	.66	.36	.91	.69	TRACE	1.02
64	.19	.22	.21	.08	TRACE	TRACE	.35	.90	.43	.38	.04	.75	.90
65	.81	.84	.83	.70	.35	TRACE	.27	.42	.75	TRACE	.32	1.55	1.55
66	.30	.88	.20	TRACE	TRACE	TRACE	.56		1.83	.05	.27	.39	
67	.34	TRACE	.22	.15	.02	.33	.54		.72	.32	.48	1.66	
68	.07	.63	.41	TRACE		.04	.44	.09	.00	.29	.46	.26	
69	.91	.19	.32	.19	.21	.00	.66	.49	.26	TRACE	.47	.37	.91
70	.04	.19	.71	TRACE	.00	.00	.02	.67	2.47	.02	.04	.31	2.47
71	.16	.19	TRACE	.01	.06	.00	.35	.35	.79	.08	TRACE	.14	.79
72	.00	TRACE	.00	TRACE	.05	.09	.70						
MEAN	.42	.38	.31	.15	.07	.07	.44	.24	.60	.32	.25	.41	1.22
S. D.	.455	.408	.244	.261	.134	.166	.401	.391	.850	.401	.246	.462	.710
TOTAL OBS.	775	679	775	780	806	810	837	744	780	806	750	806	9248

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

PRECIPITATION  
(FROM DAILY OBSERVATIONS)

20111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-46, 51-72  
YEARS

24 HOUR AMOUNTS IN INCHES  
/BASED ON LESS THAN FULL MONTHS/

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
42		.28 27											PRECIP DAYS
43	.90 29												PRECIP DAYS
46		.02 14									.34 15		PRECIP DAYS
51				.18 14									PRECIP DAYS
66								.58 30					PRECIP DAYS
67								.29 30					PRECIP DAYS
68					.01 11								PRECIP DAYS
MEAN													
S. D.													
TOTAL OBS.													

DATA PROCESSING BRANCH.  
USAF/ETAC  
AIR WEATHER SERVICE/HAC

# DAILY AMOUNTS

PERCENTAGE FREQUENCY OF  
SNOWFALL  
(FROM DAILY OBSERVATIONS)

22111 LUKE AFB ARIZONA/PHOENIX

46, 51-72

STATION

STATION NAME

YEARS

PRECIP	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	01	02-05	06-10	11-25	26-50	51-100	101-250	251-500	501-1000	1001-2000	OVER 2000			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	0104	0514	1524	2534	3544	4564	65104	105154	155254	255504	OVER 504					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	99.9	.1													682	TRACE	TRACE	.0
FEB	99.8	.2													594	TRACE	TRACE	.0
MAR	100.0														651	.0	.0	.0
APR	100.0														660	.0	.0	.0
MAY	100.0														682	.0	.0	.0
JUN	100.0														690	.0	.0	.0
JUL	100.0														713	.0	.0	.0
AUG	100.0														620	.0	.0	.0
SEP	100.0														660	.0	.0	.0
OCT	100.0														682	.0	.0	.0
NOV	100.0														630	.0	.0	.0
DEC	99.4	.6													651	TRACE	TRACE	.0
ANNUAL	99.9	.1													7915	.0	X	X

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

SNOWFALL  
(FROM DAILY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 46, 51-72  
STATION STATION NAME YEARS

## 24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
46	.0			.0	.0	.0	.0	.0	.0	.0			
51					.0	.0	.0	.0	.0	.0	.0	.0	
52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
53	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
55	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
57	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
59	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
62	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
63	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
64	.0	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE
65	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
67	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE	
68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE	
69	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
72	.0	.0	.0	.0	.0	.0	.0						
MEAN	TRACE	TRACE	.00	.00	.00	.00	.00	.00	.00	.00	.00	TRACE	.00
S. D.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL OBS.	682	594	651	660	682	690	712	620	660	682	630	651	7915

DATA PROCESSING BRANCH  
USAF/STAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

SNOWFALL  
(FROM DAILY OBSERVATIONS)

20111 LUKU AFB ARIZONA/PHOENIX 46, 51-72  
STATION STATION NAME YEARS

24 HOUR AMOUNTS IN INCHES  
/BASED ON LESS THAN FULL MONTHS/

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
41												0	SNOWFALL DAYS
42	0	0	0	0	0	0	0	0	0	0	0	0	SNOWFALL DAYS
43	0	0	0	0	0	0	0	0	0	0	0	0	SNOWFALL DAYS
44	0	0	0	0	0	0	0	0	0	0	0	0	SNOWFALL DAYS
45	0	0	0	0	0	0	0	0	0	0	0	0	SNOWFALL DAYS
46		14.0									15.0		SNOWFALL DAYS
51				14.0									SNOWFALL DAYS
66								30.0					SNOWFALL DAYS
67								30.0					SNOWFALL DAYS
68					11.0								SNOWFALL DAYS
MEAN													
S. D.													
TOTAL OBS.													

1 DATA PROCESSING BRANCH  
USAF, STAC  
AIR WEATHER SERVICE/MAC

# DAILY AMOUNTS

PERCENTAGE FREQUENCY OF  
SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

23111

LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION

STATION NAME

YEARS

PRECIP	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	01	.02-.05	06-10	11-25	26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	01-04	05-14	15-24	25-34	35-44	45-64	65-104	105-154	155-254	255-504	OVER 504					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	100.0														806			
FEB	100.0														707			
MAR	100.0														778			
APR	100.0														780			
MAY	100.0														806			
JUN	100.0														810			
JUL	100.0														837			
AUG	100.0														766			
SEP	100.0														780			
OCT	100.0														806			
NOV	100.0														750			
DEC	100.0														806			
ANNUAL	100.0														907			

DATA PROCESSING BRANCH  
USAF-ETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

22111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION

STATION NAME

YEARS

## DAILY SNOW DEPTH IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
41												0	
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0			0	0	0	0	0	0	0	0	0	0
51					0	0	0	0	0	0	0	0	
52	0	0	0	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	0
68	0	0	0	0	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0
S. D.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL OBS.	806	707	773	780	806	810	837	744	780	806	750	806	9407



DATA PROCESSING BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

## EXTREME VALUES

**SNOW DEPTH**  
(FROM DAILY OBSERVATIONS)

**22111**  
**STATION**

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-46, 51-72

**YEARS**

DAILY SNOW DEPTH IN INCHES  
/BASED ON LESS THAN FULL MONTHS/

[illegible]

DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAC)  
ASHEVILLE, NORTH CAROLINA

## PART C

## SURFACE WINDS

Presented in this part are various tabulations of surface winds as follows:

1. Extreme Values - Peak Gusts: Derived from daily observations and presented by individual year and month for the entire period of record available. Speeds are presented in knots, while directions are given in 16 compass points from the beginning of record through ~~1968~~ <sup>JUNE</sup> 1968, and in tens of degrees starting in ~~1968~~ <sup>JULY</sup> 1968. When 90% or more of the daily observations of peak gust wind data are available for a month, the extreme is selected and printed. These values are then used to compute means and standard deviations for the entire period. Every month of a year must have valid observations present before the ALL MONTHS value is selected for that year. Means and standard deviations are computed when four or more values are present for any column. A supplementary list of Peak Gusts by year-month with < 90% observations reported is also provided.

NOTE: According to Circular N specifications, "peak gust data are recorded only at stations with continuous instantaneous wind-speed recorders."

2. Bivariate percentage frequency tabulations: Derived from hourly observations, these tabulations are a percentage frequency of wind directions to 16 compass points and calm by wind speeds (knots) in increments of Beaufort classifications. Percentages are shown by both direction and speed, and in addition the mean wind speed for each direction.

A separate category is provided on the form for variable winds, which are reported in some data sources. In these data where light and variable winds are reported with no directions but with speeds given, the speeds will be summarized in the appropriate groups opposite the column headed VARBL.

- a. Three tables are prepared for all surface winds included, and for all years combined as follows:

- (1) Annual - all hours combined
- (2) By month - all hours combined
- (3) By month - by standard 3-hour groups

- b. A separate annual table is also presented for surface winds meeting the following ceiling and visibility conditions: INSTRUMENT CLASS: Ceiling 200 through 1400 feet inclusive with visibility equal to or greater than 1/2 mile, and/or visibility 1/2 through 2-1/2 miles inclusive with ceiling equal to or greater than 200 feet.

1 DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

SURFACE WINDS  
(FROM DAILY OBSERVATIONS)

22111 LUKE AFB ARIZONA/PHOENIX

46, 59-72

STATION

STATION NAME

YEARS

## DAILY PEAK GUSTS IN KNOTS

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
46	NNE 30			SE 28SW 33									
59		SW 40NW 32N	30SW 36SW 30W	36S	39NNE 69SW 33S	48NNE 30NE 30SSW 34							
60	NW 28SW 32N	30SW 36SW 30W	36S	39NNE 69SW 33S	48NNE 30NE 30SSW 34								
61	NNE 25		SW 39										
62	NNW 28SW 39SSW 33		SW 27ENE 31SSE 40										
63	NNE 38NNW 30W	38W	37SSW 28SW 28SW 29										
64	N 32NW 32SW 31SSW 30NNW 32SSW 34NNW 42NW 42SE 29E 29SW 26NNE 26												NNW 42
65	WSW 34NNW 37WSW 31W	34SW 31WSW 34E	32SSE 32SE 34ENE 29W 29S 23										NNW 37
66	N 32NNE 29W	37SW 38SW 32SSW 32S	33N 30WSW 28W 30SSW 36W 31										N 50
67	N 32E 37NW 27SW	39ESE 40S	49NNE 40N 62SE 35SSW 40SW 34W 33										N 62
68	N 28NNE 28NNW 31W	29	WSW 3536/ 5232/ 3823/ 3329/ 3306/ 3328/ 41										
69	30/ 2221/ 3731/ 4921/ 3334/ 3723/ 31	7/ 41	3/ 4633/ 4522/ 2936/ 3030/ 27										31/ 49
70	3/ 2930/ 2920/ 3325/ 37	2/ 2728/ 30	7/ 37	4/ 49									
71	28/ 2632/ 30		5/ 3324/ 2424/ 4035/ 3913/ 3316/ 30	3/ 2122/ 26									
72	3/ 22	3/ 3122/ 3321/ 3321/ 3721/ 39	3/ 48										
MEAN	28.6	33.4	33.9	33.8	32.2	34.0	41.8	45.2	35.7	30.2	29.2	28.4	48.0
S D	4.234	5.026	5.632	3.632	4.063	6.151	10.278	9.590	7.591	4.975	4.733	5.885	9.460
TOTAL OBS.	429	366	364	388	400	384	400	338	329	367	357	362	441.4

DATA PROCESSING BRANCH  
USAF ETAC  
AFS WEATHER SERVICE/MAC

# EXTREME VALUES

SURFACE WINDS  
(FROM DAILY OBSERVATIONS)

28111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46, 59-72  
YEARS

DAILY PEAK GUSTS IN KNOTS  
/BASED ON LESS THAN 90% OBSERVATIONS FOR MONTH/

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45	0	0	0	0	2	0	0	0	0	0	0	0	WINDS DAYS
46		NW 23 12				0	0	0	0	0	0		WINDS DAYS
58	0	0	0	2	0	0	0	0	0	0	0	0	WINDS DAYS
59	WNW 31 24												WINDS DAYS
60											WSW 34 24		WINDS DAYS
61		0	W 31 18		W 40N 40E 40 26	21	26					SSW 19 27	WINDS DAYS
62				SW 34 26				SW 33NNE 30 25 26					WINDS DAYS
63								ESE 49 25		WNW 32 27			WINDS DAYS
68					WSW 30 11								WINDS DAYS
70									13/134 22				WINDS DAYS
71			32/ 3227/ 32 23 18										WINDS DAYS
MEAN													
S. D.													
TOTAL OBS.													

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

STATION 23111 STATION NAME LUKE AFB ARIZONA/PHOENIX YEARS 41-46, 51-72 MONTH ALL

CLASS ALL WEATHER

CONDITION \_\_\_\_\_

MOSES (L.S.T.) ALL

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.3	7.0	2.1	.3	.1	.0	.0	.0				13.7	4.9
NNE	1.5	1.8	.7	.3	.1	.0	.0					4.4	3.6
NE	2.0	1.7	.6	.2	.0	.0	.0	.0				4.3	4.7
ENE	.8	.9	.3	.1	.0	.0	.0	.0				2.2	4.8
E	1.7	1.6	.7	.2	.0	.0	.0	.0				4.2	4.8
ESE	.7	.8	.4	.1	.0	.0	.0					2.1	5.3
SE	1.3	1.3	.6	.1	.0	.0	.0					3.3	4.3
SSE	.7	.9	.4	.1	.0	.0		.0				2.1	4.9
S	1.9	2.7	1.6	.4	.0	.0	.0					6.6	5.6
SSW	1.0	2.2	2.6	1.3	.1	.0	.0	.0				7.3	7.6
SW	1.8	3.1	3.8	1.9	.3	.0	.0					10.9	7.7
WSW	.7	1.2	1.4	.8	.1	.0	.0	.0				4.2	7.8
WNW	.9	1.3	.7	.3	.1	.0						3.3	6.1
NW	.5	.6	.3	.2	.0	.0	.0	.0				1.6	6.3
NNW	1.2	1.4	.6	.2	.0	.0	.0					3.5	5.3
VARBL	1.4	2.5	.9	.1	.0	.0	.0					4.9	5.1
CALM												11.1	
	22.6	31.0	17.4	6.6	1.0	.2	.0	.0				100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 227467

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 52-72 JAN  
STATION STATION NAME YEARS NORTH  
ALL WEATHER  
CLASS  
ALL  
NCURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.3	11.9	3.1	.4	.1	.0						22.0	4.9
NNE	2.2	2.7	1.0	.8	.2	.1						7.0	6.2
NE	2.3	1.9	.8	.2	.0							5.2	4.8
ENE	.9	.8	.2	.1	.0							2.1	4.5
E	1.8	1.3	.6	.1	.0							3.7	4.5
ESE	.9	.7	.2	.0								1.8	4.1
SE	1.5	.9	.1	.0	.0							2.6	3.7
SSE	1.0	.7	.1	.0								1.7	3.6
S	1.8	1.8	.4	.1	.0							4.2	4.3
SSW	.9	1.2	.5	.2	.0							2.9	5.5
SW	1.2	1.3	.6	.4	.1	.0						3.6	5.8
WSW	.4	.4	.2	.2	.0	.0						1.3	6.2
W	.6	.6	.2	.2	.1							1.8	6.2
WNW	.6	.5	.2	.2	.0	.0						1.5	5.7
NW	1.8	1.7	.6	.2	.0	.0						4.3	4.9
NNW	2.4	4.1	1.2	.1	.0							7.9	4.8
VARBL													
CALM												26.6	
	26.7	32.4	10.2	3.4	.6	.2						100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 19198

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111      LUKE AFB ARIZONA/PHOENIX      42-46, 52-72      FEB  
STATION      STATION NAME      YEARS      MONTH  
ALL WEATHER  
CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.4	11.0	3.3	.5	.1	.0	.0					20.4	5.1
NNE	1.7	2.4	.9	.4	.1	.0	.0					5.3	5.8
NE	2.0	1.9	.6	.2	.0							4.9	4.8
ENE	.8	1.0	.3	.1	.0							2.2	5.1
E	1.5	1.5	.6	.1	.0							3.7	4.7
ESE	.0	.9	.2	.0								2.0	4.4
SE	1.3	1.1	.2	.0								2.6	4.0
SSE	.8	.7	.2	.0								1.8	4.2
S	2.1	2.7	1.1	.3	.0							6.2	5.1
SSW	1.0	1.9	1.2	.6	.1	.0						4.8	6.6
SW	1.2	2.1	1.7	.9	.1	.1						6.0	7.1
WSW	.5	.8	.8	.3	.1	.0						2.7	7.5
W	.8	.8	.6	.4	.1	.1						2.9	7.3
WNW	.5	.6	.3	.4	.1	.0	.0					1.9	7.9
NW	1.3	1.7	.8	.3	.1	.0						4.3	5.8
NNW	2.0	3.9	1.5	.2	.0	.0						7.6	5.3
VARBL													
CALM												20.5	
	23.6	35.0	14.4	5.1	1.0	.3	.0					100.0	4.4

TOTAL NUMBER OF OBSERVATIONS 17095

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-45, 52-72  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.0	8.6	2.7	.5	.1	.0						15.9	5.2
NNE	1.5	2.3	.7	.5	.1	.0						5.1	5.8
NE	1.9	1.8	.6	.2	.0		.0					4.4	4.7
ENE	.9	1.0	.3	.1								2.3	4.6
E	1.6	1.7	.5	.1	.0							3.9	4.6
ESE	.6	1.2	.3	.0								2.1	4.7
SE	1.2	1.3	.3	.0								2.0	4.3
SSE	.7	1.1	.2	.0	.0							2.1	4.6
S	1.9	2.3	2.1	.6	.0	.0						8.0	5.9
SSW	1.0	2.4	2.4	1.2	.2	.1						7.3	7.7
SW	1.2	2.8	3.0	2.0	.2	.0	.0					9.4	8.1
WSW	.6	1.0	1.1	.7	.3	.0	.0					2.8	8.4
W	.6	1.1	.8	.6	.2	.0						3.3	7.6
WNW	.5	.6	.4	.5	.2	.1	.0	.0				2.3	8.7
NW	1.2	1.8	.9	.5	.1	.0	.0					4.7	6.3
NNW	1.4	3.2	1.3	.2	.0							6.2	5.5
VARBL													
CALM												16.2	
	20.9	35.6	17.7	7.8	1.6	.3	.0	.0				100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 18500



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.3	5.8	1.5	.2	.0							10.9	4.8
NNE	1.2	1.7	.5	.3	.1	.0						3.8	5.4
NE	1.5	1.5	.5	.1	.0	.0						3.7	4.6
ENE	.7	.8	.3	.1								1.8	4.6
E	1.6	1.6	.5	.1	.0							3.9	4.6
ESE	.6	.8	.4	.1	.0							1.9	5.1
SE	1.2	1.4	.6	.1	.0	.0						3.3	4.8
SSE	.6	1.1	.4	.1	.0							2.2	5.0
S	1.6	3.2	2.2	.9	.1	.0						8.1	6.5
SSW	1.0	2.8	3.8	2.2	.4	.1		.0				10.3	8.5
SW	1.5	3.9	5.0	3.2	.7	.2	.0					14.4	8.8
WSW	.6	1.6	1.7	1.4	.4	.1	.0					5.8	9.1
W	.8	1.3	.9	.6	.1	.0						3.8	7.0
WNW	.5	.7	.5	.4	.1	.0						2.3	7.4
NW	1.0	1.3	.8	.3	.0	.0						3.4	5.8
NNW	1.1	2.2	.8	.1	.0							4.2	3.1
VARBL													
CALM												16.3	
	19.1	31.6	20.4	10.1	2.0	.5	.0	.0				100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 18920

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 MAY  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
ALL  
HOURS (L.S.T.)

SPEED (KNTS) DIP.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.5	3.7	1.2	.1	.0	.0						7.6	4.8
NNE	1.2	1.2	.3	.2	.0	.0						2.9	5.1
NE	1.7	1.4	.4	.1	.0							3.6	4.5
ENE	.8	.9	.3	.1	.0							2.1	4.9
E	1.5	1.4	.5	.1	.0							3.5	4.7
ESE	.6	.7	.4	.1	.0		.0					1.9	5.5
SE	1.2	1.4	.6	.1	.0							3.3	5.0
SSE	.7	.9	.4	.1	.0	.0						2.0	5.1
S	2.0	3.2	2.3	.6	.1	.0						8.2	6.0
SSW	1.3	3.1	4.8	2.3	.3	.0	.0					11.7	8.1
SW	2.1	5.0	7.5	4.2	.8	.1						19.6	8.4
WSW	.8	2.0	2.8	2.0	.3	.0	.0	.0				7.9	8.8
W	1.0	2.0	1.2	.4	.1	.0						4.7	6.3
WNW	.4	.6	.4	.2	.0							1.6	6.4
NW	1.0	.5	.5	.2	.0	.0						2.7	5.7
NNW	.8	1.2	.5	.1	.0							2.5	5.0
VARBL													
CALM												14.1	
	19.5	29.5	24.2	10.7	1.7	.2	.0	.0				100.0	5.8

TOTAL NUMBER OF OBSERVATIONS 19968

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 5	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.4	2.6	.6	.1	.0	.0						5.7	4.4
NNE	.9	1.0	.3	.1	.0							2.3	4.9
NE	1.6	1.1	.2	.0	.0							3.0	3.7
ENE	.6	.6	.2	.0	.0							1.5	4.5
E	1.5	1.2	.3	.1	.0							3.1	4.3
ESE	.6	.7	.3	.1	.0							1.7	5.1
SE	1.3	1.4	.5	.1	.0	.0						3.3	4.7
SSE	.7	1.1	.5	.1	.0							2.4	5.2
S	1.9	3.2	2.4	.6	.0	.0	.0					8.2	6.1
SSW	1.2	3.4	5.1	2.5	.2							12.4	8.0
SW	2.5	5.4	8.2	4.1	.5	.1						20.8	8.1
WSW	.9	2.5	3.2	1.7	.2	.0	.0					8.4	8.1
W	1.1	2.1	1.5	.5	.0	.0						5.2	6.1
WNW	.5	.5	.3	.1	.0							1.4	3.2
NW	1.0	1.1	.4	.1	.0							2.6	4.7
NNW	.9	1.0	.3	.1	.0		.0					2.3	4.7
VARBL													
CALM												15.7	
	19.8	28.9	24.1	10.3	1.0	.1	.0					100.0	5.5

TOTAL NUMBER OF OBSERVATIONS 19065

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 51-72 YEARS MONTH JUL  
ALL WEATHER CLASS ALL HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	2.3	.9	.2	.1	.0	.0	.0				5.2	5.4
NNE	.8	1.0	.4	.2	.1	.0	.0					2.5	6.1
NE	1.0	1.4	.5	.2	.0	.0						4.0	4.7
ENE	.7	.9	.3	.1	.0	.0						1.9	3.3
E	1.3	1.6	.7	.2	.0	.0	.0					3.9	5.4
ESE	.6	.8	.6	.2	.0	.0	.0					2.2	6.2
SE	1.3	1.5	1.0	.3	.0		.0					4.1	5.7
SSE	.6	1.1	.7	.2	.0	.0		.0				2.7	5.8
S	1.8	3.6	2.9	.7	.0	.0	.0					9.1	6.3
SSW	1.1	3.0	4.9	3.1	.2	.0	.0					12.4	8.5
SW	2.6	4.8	7.2	3.5	.3	.1	.0					13.4	7.9
WSW	.9	2.2	2.5	1.0	.1	.0						5.7	7.5
W	1.2	2.1	1.2	.3	.0	.0						4.7	5.7
WNW	.5	.7	.3	.0	.0							1.5	4.9
NW	.9	1.1	.5	.1	.0	.0						2.7	5.2
NNW	.6	1.0	.4	.1	.0							2.1	5.3
VARBL													
CALM												15.7	
	18.4	29.0	25.0	10.5	1.2	.2	.1	.0				100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 19802

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

ALL  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.4	3.6	1.2	.2	.1	.0	.0					7.6	5.1
NNE	1.0	1.2	.5	.2	.1	.0	.0					3.0	5.6
NE	2.1	1.8	.6	.2	.0	.0	.0	.0				4.8	4.8
ENE	.7	1.0	.4	.1	.0	.0	.0	.0				2.2	5.3
E	1.8	2.0	.8	.2	.0	.0	.0					4.8	5.2
ESE	.8	1.0	.8	.3	.0	.0						2.9	6.2
SE	1.6	1.9	1.1	.3	.1	.0	.0					3.0	5.8
SSE	.7	1.4	.8	.2	.0	.0						3.1	5.9
S	2.5	3.5	2.3	.6	.1	.0						8.9	5.8
SSW	1.0	2.7	3.4	1.5	.1	.0	.0					9.6	7.7
SW	2.4	4.6	5.1	2.0	.2	.0						14.4	7.2
WSW	.9	1.4	1.5	.6	.1	.0	.0					4.5	7.0
W	1.2	1.6	.8	.2	.0							3.8	5.3
WNW	.5	.6	.3	.1	.0	.0						1.5	5.6
NW	1.1	1.2	.4	.2	.1	.0						3.0	5.3
NNW	.8	1.4	.5	.2	.0	.0						2.9	5.7
VARBL													
CALM												18.9	
	21.6	30.9	20.4	6.9	.9	.3	.1	.0				100.0	5.0

TOTAL NUMBER OF OBSERVATIONS 19312

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 YEARS SEP MONTH  
ALL WEATHER CLASS ALL HOURS (L S T)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.2	6.0	2.0	.3	.0	.0						12.6	4.8
NNE	1.5	1.7	.6	.3	.0	.0	.0					4.1	5.2
NE	2.7	1.8	.5	.2	.0	.0						5.2	4.4
ENE	1.1	1.2	.5	.1								2.8	4.8
E	2.3	2.3	1.1	.3	.0							6.0	5.1
ESE	.7	1.1	.9	.3	.0	.0						3.1	6.3
SE	1.6	1.6	.9	.3	.1	.0	.0					4.4	5.6
SSE	.6	1.0	.5	.1	.0	.0						2.3	5.5
S	1.9	2.2	1.3	.2	.0	.0						5.6	5.2
SSW	.9	1.9	1.9	.7	.0	.0						5.4	6.9
SW	2.0	3.1	3.0	1.1	.2	.0						9.3	6.9
WSW	.8	.9	1.1	.5	.0	.0						3.2	6.9
W	1.1	1.5	.7	.1	.0							3.4	5.3
WNW	.5	.6	.2	.0	.0							1.3	4.7
NW	1.3	1.3	.4	.1	.0	.0	.0					3.1	4.7
NNW	1.2	2.2	.7	.0	.0	.0						4.1	5.0
VARBL													
CALM												23.8	
	24.1	30.4	16.4	4.6	.6	.1	.0					100.0	4.2

TOTAL NUMBER OF OBSERVATIONS 18688

DATA PROCESSING BRANCH  
ETAC/100F  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 OCT  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
ALL  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.5	8.4	3.0	.4	.1	.0	.0					17.3	5.0
NNE	2.1	2.1	.9	.2	.1	.0						5.4	5.1
NE	2.5	2.0	.9	.2	.0							5.6	4.7
ENE	1.0	.9	.5	.1	.0							2.5	4.8
E	2.1	2.2	1.2	.3	.0							5.8	5.1
ESE	.9	.9	.6	.1	.0							2.6	5.2
SE	1.3	1.4	.7	.1								3.5	4.9
SSE	.6	.7	.3	.0								1.6	4.8
S	1.8	1.9	.8	.1	.0							4.6	4.7
SSW	.9	1.6	1.2	.4	.0							4.1	6.3
SW	1.4	2.1	1.7	.6	.1	.0						5.9	6.5
WSW	.6	.9	.7	.3	.0	.0						2.4	6.5
W	.9	1.0	.4	.1	.0	.0						2.5	5.2
WNW	.4	.6	.1	.1	.0	.0						1.3	5.5
NW	1.3	1.4	.3	.1	.0	.0						3.2	4.8
NNW	1.6	2.7	.8	.1	.0							5.2	4.7
VARBL													
CLM												26.4	
	24.8	30.6	14.3	3.2	.4	.1	.0					100.0	3.8

TOTAL NUMBER OF OBSERVATIONS 19310

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

29111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 NOV  
STATION STATION NAME YEARS MONTH  
ALL WEATHER CLASS ALL  
CONDITION HOURS (L & T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	0.8	10.2	2.8	.4	.1	.0	.0					20.3	4.8
NNE	2.0	2.3	1.2	.5	.1							6.0	5.7
NE	2.0	1.8	.7	.3	.0	.0						4.9	5.0
ENE	.9	1.0	.4	.2	.0							2.5	5.0
E	1.9	1.7	.7	.2	.0	.0						4.5	4.9
ESE	.8	.8	.3	.0								1.9	4.5
SE	1.3	.9	.3	.0								2.5	4.2
SSE	.8	.6	.1	.0								1.6	3.8
S	2.2	.8	.6	.1	.0							4.6	4.2
SSW	.9	1.3	.8	.3	.0							3.3	5.8
SW	1.4	1.1	1.0	.4	.0							4.0	5.9
WSW	.5	.5	.4	.2	.0							1.5	6.1
W	.8	.6	.3	.2	.1	.0						1.9	5.7
WNW	.4	.4	.1	.2	.0	.0						1.2	5.9
NW	1.5	1.4	.5	.2	.0	.0						3.6	4.9
NNW	2.1	3.5	1.2	.1	.0							6.3	4.9
VARBL													
CALM												28.8	
	36.3	29.7	11.4	3.3	.3	.1	.0					100.0	3.6

TOTAL NUMBER OF OBSERVATIONS 18322



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 41-45, 51-71 YEARS DEC MONTH  
ALL WEATHER CLASS ALL HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.2	10.6	2.6	.2	.0							20.3	4.6
NNE	2.3	2.1	.9	.5	.1	.0						6.0	5.3
NE	2.2	1.9	.8	.2	.0	.0						5.1	4.7
ENE	.9	.8	.3	.1	.0							2.1	4.5
E	1.7	1.3	.5	.1								3.6	4.5
ESE	.8	.6	.2	.0								1.6	4.0
SE	1.0	.8	.2	.0								2.0	3.9
SSE	.8	.3	.1	.0		.0						1.5	3.8
S	1.6	1.7	.5	.1	.0							3.9	4.5
SSW	1.2	1.0	.6	.3	.0							3.2	5.6
SW	1.3	1.1	.8	.3	.1	.0						3.6	6.1
WSW	.4	.4	.3	.2	.0	.0						1.4	6.2
W	.8	.6	.2	.2	.0							1.8	5.3
WNW	.5	.4	.2	.2	.0	.0						1.3	6.0
NW	2.0	1.5	.5	.2	.1	.0						4.4	4.6
NNW	2.2	3.8	1.2	.2	.0							7.3	4.9
VARBL													
CALM												30.7	
	26.8	29.3	9.9	2.7	.5	.1						100.0	3.3

TOTAL NUMBER OF OBSERVATIONS 19287

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	8.2	22.7	6.2	.4	.0							37.6	5.0
NNE	5.2	5.1	1.5	1.0	.3	.0						11.2	5.8
NE	2.2	2.0	.7									4.9	4.3
ENE	.5	.3										.7	2.6
E	.7	.3	.1									1.0	3.4
ESE	.3	.3	.0									.6	4.3
SE	.4	.2										.6	3.4
SSE	.2	.1	.1									.4	4.1
S	.5	.3	.1	.1								1.0	5.0
SSW	.5	.4	.2	.1								1.1	5.3
SW	.5	.6	.2	.0	.1	.0						1.3	6.2
WSW	.2	.2		.2	.0							.6	7.4
W	.5	.3	.1	.2	.0							1.1	5.7
WNW	.4	.4	.2	.0								1.0	4.6
NW	1.9	2.1	.8	.1	.0							4.9	4.9
NNW	3.1	5.8	2.0	.1								10.9	5.1
VATBL													
CALM												20.7	
	23.2	41.0	12.2	2.3	.5	.1						100.0	4.0

TOTAL NUMBER OF OBSERVATIONS

2395

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

0200-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	10.8	19.8	4.6	.3	.2	.0						35.8	4.8
NNE	3.1	4.5	1.3	.5	.3	.1						9.9	5.7
NE	3.1	2.3	.6	.1	.0							6.1	4.1
ENE	1.0	.6	.1	.0								1.7	3.7
E	.6	.3	.0	.0								1.0	3.5
ESE	.1	.0	.0									.2	4.5
SE	.4	.1	.0									.5	3.7
SSE	.3	.2										.5	3.0
S	.5	.5	.1	.1								1.2	4.5
SSW	.4	.4	.1	.1	.0							1.0	5.4
SW	.2	.7	.2	.2								1.3	6.0
WSW	.2	.2	.0	.2	.0							.7	6.9
W	.3	.2	.2	.0								.7	5.6
WNW	.6	.2	.1	.1								1.0	4.6
NW	2.3	1.4	.7	.1								4.5	4.4
NNW	3.6	5.2	2.0									10.8	4.7
VARBL													
CALM												23.2	
	27.3	36.5	10.4	1.7	.7	.2						100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 2403

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	12.0	17.4	2.9	.4	.0							32.7	4.3
NNE	3.3	3.3	1.2	.8	.2	.1						8.9	5.6
NE	2.8	2.6	.5	.0								5.9	4.1
ENE	.8	.5	.1									1.4	3.7
E	.7	.2	.2									1.5	4.1
ESE	.2	.3										.5	3.2
SE	.2	.3	.0									.6	4.0
SSE	.1	.2										.4	3.7
S	.3	.5	.1									1.5	3.6
SSW	.2	.4	.2	.0								.9	5.5
SW	.3	.4	.4	.1								1.2	6.0
WSW	.2	.0	.1									.3	4.5
W	.3	.4	.2	.0								1.1	4.6
WNW	.5	.3	.1	.1	.0							1.0	5.4
NW	2.5	1.8	.8	.1								5.2	4.4
NNW	3.7	5.1	1.4	.2								11.4	4.7
VARBL													
CALM												25.6	
	28.9	35.0	8.2	1.9	.2	.1						100.0	3.4

TOTAL NUMBER OF OBSERVATIONS 2406

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

20111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 52-72 YEARS JAN MONTH 0900-1100 HOURS (L.S.T.)  
ALL WEATHER CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.4	7.6	1.6	.5	.0	.1						16.2	4.7
NNE	3.2	3.1	.8	1.8	.5	.0						9.5	3.8
NE	3.0	2.8	1.2	.7	.2							8.6	3.2
ENE	2.2	1.5	.3	.0								4.1	3.8
E	3.1	2.0	.5									5.7	3.8
ESE	1.4	1.1	.1									2.6	3.6
SE	1.7	.8	.0	.0								2.6	3.3
SSE	1.0	.3										1.2	2.7
S	.9	.7	.3	.1								1.9	4.5
SSW	.6	.6	.3	.3								1.8	6.1
SW	1.1	.5	.4	.3	.0							2.3	5.0
WSW	.3	.1	.1	.2	.0							.7	6.9
W	.5	.3	.1	.0	.0							.9	4.3
WNW	.5	.3	.0	.3	.1	.1						1.3	7.8
NW	1.0	1.1	.4	.3	.1	.0						2.9	6.2
NNW	1.5	1.9	.3	.0								4.0	4.5
VARBL													
CALM												33.5	
	29.1	24.8	6.7	4.5	1.0	.3						100.0	3.3

TOTAL NUMBER OF OBSERVATIONS 2395

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPeFD (KNTS) DIR	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.5	.6	.4	.3	.0						3.8	7.1
NNE	1.2	.9	.5	.7	.0							3.3	6.3
NE	2.0	1.9	1.0	.3	.0							5.4	5.5
ENE	1.6	1.7	.8	.3	.1							4.3	5.3
E	4.3	3.4	1.7	.5	.1							10.0	5.0
ESE	2.4	1.8	.8	.0								5.1	4.2
SE	4.2	2.5	.4	.0	.0							7.6	3.8
SSE	1.9	2.0	.2									4.1	3.8
S	3.4	2.6	.9	.2								7.1	4.3
SSW	1.2	1.3	.7	.3								3.5	5.4
SW	3.1	1.8	.9	.8	.0							6.6	5.4
WSW	.3	.7	.1	.5								2.0	6.5
W	.6	.3	.3	.2	.2							1.8	7.3
WNW	.3	.2	.3	.1		.0						1.0	7.2
NW	.5	.4	.2	.1	.0	.2						1.5	8.1
NNW	.2	.3	.2	.1								1.0	5.8
VARBL													
CALM												31.7	
	28.5	24.1	9.7	4.9	.6	.3						100.0	3.5

TOTAL NUMBER OF OBSERVATIONS 2403

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# **SURFACE WINDS**

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42=46, 52=72 JAN  
STATION STATION NAME YEARS MONTH  
ALL WEATHER 1500-1700  
CLASS HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.0	.8	.4	.1							3.2	6.6
NNE	.6	.7	.3	.4	.0							2.0	6.7
NE	1.2	.9	.6	.2	.1							3.1	5.5
ENE	.6	1.2	.4	.2								2.3	5.6
E	3.1	2.4	1.7	.3								7.5	5.1
ESE	1.5	1.3	.6	.1								3.5	4.7
SE	3.4	2.0	.3	.1								5.9	3.7
SSE	3.2	1.7	.4	.0								5.4	3.5
S	5.2	5.8	1.5	.2	.0							12.8	4.4
SSW	2.0	3.3	1.7	.7	.1							7.8	3.8
SW	2.3	2.9	1.8	1.1	.2	.0						8.4	6.6
WSW	.7	.8	.6	.4								2.5	6.1
W	.6	1.2	.7	.7	.1							3.4	7.7
WNW	.5	.3	.4	.2	.0							1.5	6.8
NW	.8	.6	.2	.2	.1	.0						2.0	6.2
NNW	.7	.5	.1	.1	.1							1.6	5.4
VARBL													
CALM												27.2	
	27.3	26.8	12.2	5.5	1.0	.1						100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 2403

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

JAN  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L S T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.1	5.0	1.3	.5	.2							11.0	4.8
NNE	1.3	.8	.8	.6		.2						3.7	5.9
NE	1.4	.8	.5	.1								2.9	4.6
ENE	.4	.5	.2									1.1	4.3
E	1.0	.9	.4									2.2	4.2
ESE	.4	.3	.1	.0								.8	4.6
SE	1.0	.8	.1									1.8	3.8
SSE	1.0	.6	.0									1.6	3.3
S	2.8	3.0	.4	.1								6.2	3.9
SSW	2.1	2.6	.5	.2	.1							5.6	4.8
SW	1.7	2.9	.7	.4	.1							5.8	5.3
WSW	1.1	.9	.4	.2	.0	.0						2.7	5.3
W	1.5	1.3	.7	.3								3.8	5.1
WNW	1.3	1.8	.4	.2								3.7	4.9
NW	3.4	2.1	.5	.0								7.0	4.0
NNW	2.7	3.8	.8	.1	.0							7.5	4.4
VARBL													
CALM												32.4	
	27.1	29.1	8.0	2.8	.4	.2						100.0	3.2

TOTAL NUMBER OF OBSERVATIONS 2400



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/PAAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 52-72 JAN  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
2100-2300  
HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.6	20.5	6.9	.6	.0							35.5	5.2
NNE	1.9	2.9	1.2	.9	.2	.2						7.3	6.8
NE	1.6	1.8	1.1	.1								4.6	5.0
ENE	.4	.3										.6	3.5
E	.6	.3		.0								1.0	3.7
ESE	.6	.2										.8	3.0
SE	.3	.4	.0	.0								.8	4.3
SSE		.3	.1									.5	5.8
S	.7	.8	.2	.2								1.8	5.0
SSW	.6	.5	.3	.2	.0							1.6	5.8
SW	.6	.6	.2	.2								1.7	5.8
WSW	.1	.3	.0	.1		.0						.6	6.8
W	.4	.6	.3	.3	.0							1.6	7.2
WNW	.6	.5	.2	.3								1.5	5.4
NW	2.1	2.6	1.1	.3								6.1	5.1
NNW	3.9	8.9	2.8	.3								15.8	5.1
VARBL													
CALM												18.3	
	21.9	41.6	14.3	3.4	.3	.3						100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 2393

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/PAAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

FEB  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	0.1	21.7	7.6	.3	.1	.1						37.9	5.3
NNE	1.0	3.8	1.0	.5	.1	.1	.0					7.4	5.9
NE	1.7	2.5	.3	.2								4.7	4.5
ENE	.4	.5	.1	.0								1.0	4.8
E	.5	.4	.1									1.0	3.8
ESE	.2	.1										.3	3.2
SE	.3	.4	.0									.7	3.9
SSE	.3	.3										.6	3.5
S	.7	1.4	.1	.3								2.5	5.6
SSW	.3	.8	.5	.3	.1							2.0	7.1
SW	.5	.8	.8	.4	.1							2.6	7.4
WSW	.3	.5	.3	.1	.1							1.4	7.2
W	.3	.4	.4	.0								1.1	6.0
WNW	.4	.4	.4	.0								1.2	5.5
NW	1.4	2.3	1.3	.3	.0							5.3	5.8
NNW	2.9	6.9	2.5	.4	.1							12.7	5.3
VARBL													
CALM												17.5	
	20.0	43.0	15.4	3.0	.7	.2	.0					100.0	4.5

TOTAL NUMBER OF OBSERVATIONS

2136

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,52-72 FEB  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	9.7	21.6	5.0	.4								36.9	4.8
NNE	2.9	4.7	1.1	.3	.1	.0						9.1	5.0
NE	3.1	2.7	.5	.1								6.5	4.1
ENE	.7	.6	.1	.1								1.5	4.5
E	.6	.5	.1									1.1	3.9
ESE	.3	.3	.0									.7	3.5
SE	.6	.1										.7	3.1
SSE	.3	.2										.5	3.4
S	.6	.7	.3	.1								1.7	5.2
SSW	.3	.6	.6	.4	.1							2.1	7.3
SW	.2	.9	.6	.3								2.0	7.0
WSW	.1	.2	.4	.1	.0							.8	8.0
W	.4	.2	.2	.2	.0							1.1	7.1
WNW	.3	.3	.2	.1		.1						.9	8.0
NW	1.6	1.9	.9	.3								4.6	5.4
NNW	2.5	6.0	2.2	.2								11.0	5.2
VARBL													
CALM												18.7	
	24.3	41.7	12.1	2.8	.3	.1						100.0	4.1

TOTAL NUMBER OF OBSERVATIONS 2136

DATA PROCESSING BRANCH  
ETAG/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

29111 LUKE AFB ARIZONA/PHOENIX 42-46, 52-72 FEB  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
0600-0800  
HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	9.5	19.7	4.0	.5	.0							33.9	4.6
NNE	3.0	3.8	1.0	.4	.1		.0					8.4	5.2
NE	2.4	2.3	.5									5.1	4.1
ENE	.7	.7	.2	.1								1.7	4.8
E	.9	.4										1.4	3.2
ESE	.5	.1										.6	2.9
SE	.5	.3										.8	3.1
SSE	.1	.0	.0									.2	3.8
S	.6	1.0	.4	.0								2.0	5.1
SSW	.3	.7	.7	.4	.0							2.1	7.5
SW	.7	.5	.6	.1								1.9	5.7
WSW	.1	.4	.2	.4								1.1	6.0
W	.3	.4	.1	.1	.0							1.1	6.4
WNW	.5	.5	.1	.2		.0						1.4	6.4
NW	2.0	2.1	.8	.2		.1						5.1	4.9
NNW	4.0	5.2	2.0	.2								11.3	4.8
VARBL													
CALM												21.9	
	26.3	38.1	10.5	2.6	.3	.1	.0					100.0	3.8

TOTAL NUMBER OF OBSERVATIONS 2137

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 52-72 FEB  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
0900-1100  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.0	4.9	1.8	1.3	.4	.0	.0					13.4	5.7
NNE	2.5	2.9	1.3	.9	.5	.1						8.1	6.9
NE	3.5	2.7	1.0	.5	.1							7.8	4.8
ENE	1.7	2.3	.4	.1	.0							4.3	4.3
E	3.6	3.2	.7	.1								7.7	4.0
ESE	2.0	1.7	.2									3.8	3.8
SE	2.5	1.2	.1									3.8	3.4
SSE	.9	.4	.1									1.5	3.3
S	1.6	1.4	.5	.1	.0							3.7	4.6
SSW	.7	1.0	1.0	.3								2.9	6.4
SW	.9	1.2	1.0	.7	.1	.0						3.8	7.3
WSW	.4	.2	.4	.4	.1							1.5	8.5
W	.6	.6	.0	.2		.0						1.5	5.9
WNW	.4	.3	.1	.3		.0						1.1	7.2
NW	.9	.7	.5	.3	.1							2.4	6.3
NNW	1.3	1.9	.7	.2	.0	.1						4.2	5.7
VARBL													
CALM												28.3	
	28.4	26.3	9.8	5.3	1.4	.4	.0					100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 2137

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/AC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

22111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

FEB  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.6	.8	.6	.1							4.3	6.7
NNE	.6	.5	.7	.3	.0							2.3	7.3
NE	2.1	1.3	.7	.4	.1							4.6	5.4
ENE	1.1	1.5	.7	.4	.2							3.9	6.1
E	3.0	3.7	1.6	.5	.1							9.0	5.4
ESE	2.4	2.8	.8	.3								6.3	4.7
SE	2.8	3.0	.8									6.7	4.2
SSE	1.7	2.3	.9	.0								4.9	4.5
S	3.2	4.2	1.3	.5								9.2	4.8
SSW	1.4	1.9	1.6	.7								5.7	6.3
SW	1.6	2.2	2.0	1.3	.2	.1						7.4	7.3
WSW	.8	.9	1.4	1.0	.3	.0						4.4	8.5
W	1.0	.8	.6	.9	.4	.1						3.8	9.0
WNW	.4	.4	.2	.4	.0							1.5	7.7
NW	.7	.4	.6	.2	.1	.0						2.1	7.5
NNW	.6	.5	.5	.2	.0	.0						1.9	7.1
VARBL													
CALM												22.2	
	24.5	27.8	15.4	7.9	1.7	.4						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 2135

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,52-72 FEB  
STATION STATION NAME YEARS  
ALL WEATHER  
CLASS  
1500-1700  
HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.2	.7	.2	.1							3.4	5.9
NNE	.3	.4	.5	.2	.0	.0						1.5	7.8
NE	.7	.7	.6	.3	.1							2.3	6.8
ENE	.6	.9	.6	.2	.0							2.4	6.1
E	2.0	1.9	1.4	.4								5.6	5.5
ESE	.6	1.0	.5	.1								2.3	5.4
SE	1.9	2.5	.8	.1								5.4	4.6
SSE	1.8	1.6	.5	.1								4.1	4.5
S	4.0	6.8	3.1	1.2								15.1	5.6
SSW	2.1	3.9	2.6	1.8	.1	.1						10.6	6.9
SW	2.0	3.9	4.7	2.9	.5	.2						14.2	8.2
WSW	.8	1.4	1.6	1.0	.2	.1						5.1	3.3
W	1.2	.9	1.7	1.4	.4	.1						5.8	9.0
WNW	.3	.5	.4	.8	.5	.1	.0					2.6	11.6
NW	.3	.5	.4	.1	.1	.0						1.5	8.0
NNW	.6	.6	.4	.3	.1							2.0	7.1
VARBL													
CALM												16.1	
	20.5	28.8	20.5	11.0	2.3	.8	.0					100.0	5.7

TOTAL NUMBER OF OBSERVATIONS 2120

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

20111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 52-72 YEARS FEB MONTH 1800-2000 MOYRS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.7	2.3	.9	.2	.1	.0						6.2	4.9
NNE	.7	1.0	.6	.3	.0							2.7	6.3
NE	1.2	1.4	.5	.1								3.2	4.5
ENE	.5	.8	.2	.0								1.6	4.8
E	.6	1.0	.4									2.0	4.6
ESE	.4	.6	.1									1.1	4.3
SE	.9	1.1	.1	.0								2.1	4.2
SSE	1.2	.9	.1									2.2	3.7
S	4.4	5.0	1.5	.1								11.3	4.5
SSW	2.2	4.3	1.8	.4	.2	.0						9.2	3.7
SW	2.5	5.5	2.6	1.0	.0	.1						11.7	6.0
WSW	.9	2.1	1.4	.3	.0							4.9	6.1
W	1.8	2.4	1.7	.3	.0	.1						6.4	6.0
WNW	1.1	1.5	.8	.7	.4							4.3	7.3
NW	1.4	2.7	.6	.5	.2							5.4	5.8
NNW	1.2	2.4	.5	.1		.0						4.2	4.9
VARBL													
CALM												21.4	
	23.7	35.1	14.3	4.1	1.1	.3						100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 2161



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/1AC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 52-72  
YEARS

FEB  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.0	14.5	6.0	.9		.0						27.5	3.4
NNE	1.8	2.3	.8	.3	.0							5.3	5.1
NE	1.5	1.3	.9	.3								4.0	5.5
ENE	.4	.7	.1									1.2	4.1
E	.7	.7	.2	.0								1.6	4.5
ESE	.2	.3	.2									.7	5.0
SE	.5	.4	.0									.9	3.9
SSE	.3	.2	.0	.1								.7	5.1
S	1.5	1.6	.8	.1	.0							4.1	5.1
SSW	.6	1.4	1.0	.3	.1							3.5	6.9
SW	1.0	1.7	1.2	.3								4.1	5.9
WSW	.7	.9	.6	.4								2.5	6.3
W	.6	1.0	.2	.2								2.1	3.4
WNW	.5	1.0	.3	.6	.1							2.4	7.5
NW	2.3	3.1	1.5	.4	.3	.0						7.6	5.7
NNW	2.9	7.7	3.9	.2		.0						13.7	5.4
VARBL													
CALM												18.1	
	21.3	38.8	15.9	4.3	.5	.1						100.0	4.5

TOTAL NUMBER OF OBSERVATIONS 2143

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-45, 52-72 MAR  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
0000-0200  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.1	16.8	5.8	.5								29.1	5.2
NNE	1.7	4.9	1.4	.6	.1							5.7	3.6
NE	2.3	2.4	.7									5.5	4.4
ENE	.6	.4	.1									1.2	3.8
E	1.0	.7	.2									1.9	3.8
ESE	.3	.2	.0									.6	3.5
SE	.4	.2	.2									.9	4.5
SSE	.2	.3	.1									.6	4.5
S	1.3	2.1	.8	.3		.0						4.5	5.6
SSW	.7	1.0	1.6	.6	.1	.0						4.0	7.5
SW	.6	1.8	1.9	1.2	.2	.0						5.8	8.1
WSW	.3	.9	.3	.2								1.5	5.9
W	.3	1.0	.4	.0								1.7	5.1
WNW	.4	.4	.5	.2								1.5	6.6
NW	1.9	2.7	1.4	.5	.0							6.5	5.8
NNW	2.2	5.4	2.7	.4	.1							10.9	5.7
VARBL													
CALM												15.3	
	20.6	40.9	18.2	4.4	.5	.1						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 2313

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAG

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-45, 52-72 MAR  
STATION MONTH  
ALL WEATHER 0300-0500  
CLASS HOURS (LST)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.7	19.7	5.4	.6	.1							33.3	5.0
NNE	2.3	4.2	.8	.5	.0							8.0	5.1
NE	2.3	3.0	.4	.2								5.9	4.6
ENE	.6	.7	.1									1.4	4.0
E	.8	1.0	.0									1.9	4.0
ESE	.2	.5										.7	3.8
SE	.4	.5	.1									1.0	4.2
SSE	.3	.3	.1									.9	4.0
S	1.0	1.9	.7	.3								2.8	5.4
SSW	.6	1.3	1.3	.8								4.0	7.3
SW	.3	1.6	1.0	.6	.1							3.7	7.3
WSW	.3	.3	.4	.2								1.2	7.0
W	.3	.3	.2	.1								.9	5.5
WNW	.2	.3	.2	.1								.8	6.7
NW	2.0	1.7	.9	.1	.0							4.8	4.9
NNW	2.3	6.2	2.4	.3	.0							11.2	5.4
VARBL													
CALM												16.4	
	21.8	43.5	14.1	3.9	.3							100.0	4.4

TOTAL NUMBER OF OBSERVATIONS 2310

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-45, 52-72  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L & T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	8.9	17.9	3.7	.7	.2	.0						31.4	4.9
NNE	2.8	3.5	.8	.8	.2							8.1	5.5
NE	2.6	2.3	.6	.1	.0							5.8	4.4
ENE	.8	.8	.0									1.6	3.7
E	1.2	.5										1.7	3.2
ESE	.3	.3	.1									.7	4.1
SE	.6	.4	.0									1.0	3.6
SSE	.2	.4	.2									.8	5.1
S	1.1	1.7	.8	.1								2.7	5.3
SSW	.7	1.3	1.1	.5								3.7	6.6
SW	.7	1.4	1.3	.6	.1							4.0	7.0
WSW	.3	.3	.3	.2	.1							1.2	7.0
W	.4	.4	.1	.1	.0							1.0	5.4
WNW	.3	.4	.1	.3	.0							1.2	6.9
NW	1.9	1.9	.5	.1	.0							4.5	4.5
NNW	3.1	7.0	1.3	.2								11.5	4.8
VARBL													
CALM												18.0	
	26.0	40.7	10.9	3.7	.7	.0						100.0	4.1

TOTAL NUMBER OF OBSERVATIONS

2316

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-43,52-72 YEARS MAR MONTH 0930-1100 HOURS (L.S.T.)

ALL WEATHER CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.2	3.0	1.9	1.0	.3	.1						8.6	6.7
NNE	1.5	2.4	.9	.6	.6							6.1	6.9
NE	2.9	2.7	.9	.8	.1							7.8	5.5
ENE	2.4	2.6	.8	.4								6.4	4.0
E	4.4	4.0	.8	.1								9.3	4.1
ESE	1.2	3.4	.7	.0								5.6	4.6
SE	3.0	2.7	.2									5.9	3.7
SSE	1.0	1.0	.1									2.1	3.7
S	1.6	1.7	1.1	.9								5.4	6.2
SSW	.9	1.6	1.5	1.5	.1							5.7	7.9
SW	1.0	1.1	2.6	2.1	.4	.1						7.3	9.4
WSW	.3	.2	.1	.3	.2							1.2	9.4
W	.4	.3	.1	.2	.2							1.1	7.7
WNW	.3	.0	.3	.1	.2	.0						.9	9.9
NW	.6	.5	.3	.3	.0	.1						2.1	7.9
NNW	.4	.8	.6	.1								1.9	5.9
VARBL													
CALM												22.9	
	24.7	28.2	13.1	8.6	2.2	.3						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 2316

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

22111 LUKE AFB ARIZONA/PHOENIX 42-43,52-72 MAR  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
1200-1400  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	.6	.3	.0	.1						3.2	6.4
NNE	.5	.5	.5	.3	.0							1.9	6.9
NE	1.2	1.5	.3	.2								3.6	5.3
ENE	1.1	1.4	.6	.1								3.2	5.0
E	2.3	3.8	1.5	.2	.0							7.7	5.1
ESE	1.2	2.0	.7	.1								4.7	5.0
SE	2.3	4.2	.9	.1								7.5	4.7
SSE	1.8	2.9	.6	.0								3.4	4.6
S	2.5	5.9	3.5	.8	.0							12.8	5.9
SSW	1.3	3.0	3.3	2.0	.6	.1						10.2	8.3
SW	1.5	3.0	3.4	3.1	.6	.1						12.1	8.6
WSW	1.2	1.2	1.0	1.1	.6	.2						5.3	9.2
W	.3	1.2	1.0	.9	.3	.1						4.3	8.3
WNW	.1	.3	.4	.6	.2	.1	.0					1.7	11.9
NW	.3	.5	.2	.3		.0	.0					1.4	8.3
NNW	.3	.6	.2	.1								1.2	5.9
VARBL													
CALM												13.9	
	19.5	33.7	19.3	10.3	2.5	.6	.1					100.0	5.8

TOTAL NUMBER OF OBSERVATIONS 2310

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/PAO

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-45, 52-72  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

1500-1700  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.6	.6	.1	.0	.0						1.9	6.6
NNE	.6	.4	.1	.4	.0	.0						1.6	7.5
NE	1.0	.8	.2	.0			.0					2.1	4.6
ENE	.3	.4	.4	.0								1.2	5.8
E	.8	1.6	.7	.2								3.3	5.9
ESE	.5	1.1	.3	.0								1.9	5.1
SE	1.6	2.1	.5									4.2	4.3
SSE	.7	1.9	.5	.3								3.4	5.5
S	2.5	5.6	5.8	1.6	.1							15.8	6.8
SSW	1.1	3.5	5.5	2.9	.5	.2						13.7	8.8
SW	1.9	4.7	5.4	4.8	.9		.1					17.7	8.9
WSW	.7	1.9	2.7	2.4	1.1	.1	.0					9.0	10.3
W	.8	1.6	1.4	1.9	.7	.0						6.4	9.6
WNW	.5	.5	.4	1.3	.6	.3	.0	.0				3.7	12.5
NW	.5	.6	.5	.8	.3	.2						2.9	9.9
NNW	.3	.3	.3	.3								1.2	7.5
VARBL													
CALM												10.0	
	14.5	27.6	23.4	17.1	4.3	.9	.2	.0				100.0	7.3

TOTAL NUMBER OF OBSERVATIONS 2311

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-45, 52-72 YEARS MAR MONTH 1990-2000 HOURS (L.S.T.)  
ALL WEATHER CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.0	.4	.2	.0	.0						2.7	5.3
NNE	.6	.6	.3	.0	.0							1.6	5.4
NE	.8	.3	.3	.0								1.4	4.6
ENE	.6	.8	.1	.1								1.6	4.7
E	.9	1.2	.5	.1	.0							2.8	5.3
ESE	.4	.6	.2									1.4	5.1
SE	.8	1.0	.1	.0								2.0	4.3
SSE	.8	1.3	.2	.0								2.4	4.4
S	3.9	5.7	2.6	.2	.1	.0						12.5	5.2
SSW	1.8	5.2	3.7	1.3	.1	.1						12.3	6.8
SW	2.2	6.0	5.6	3.6	.3							16.3	7.3
WSW	1.2	2.3	2.4	1.1	.0							7.1	7.0
W	1.3	2.4	2.5	1.3	.1							7.7	7.3
WNW	1.1	1.4	1.0	1.0	.2	.0						4.8	7.6
NW	1.3	2.3	1.3	.8	.3	.0						6.0	7.2
NNW	.8	.9	.4	.2	.1							2.4	6.0
VARBL													
CALM												14.8	
	19.6	33.1	21.8	9.1	1.3	.3						100.0	5.5

TOTAL NUMBER OF OBSERVATIONS 2311



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-45, 52-72  
YEARS

MAR  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L & T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.5	8.5	3.2	.3								16.5	5.0
NNE	1.5	2.2	.9	.3	.1							5.0	5.5
NE	1.6	1.7	.6									3.8	4.3
ENE	.5	.8	.1	.0								1.5	4.6
E	1.1	.8	.3	.0								2.2	4.3
ESE	.2	.5	.3									1.0	5.0
SE	.4	.7	.2									1.3	4.5
SSE	.6	.5	.0		.0							1.2	4.1
S	1.4	2.2	1.4	.3	.0							5.4	5.7
SSW	1.1	2.7	1.5	.8	.1	.1						6.3	6.9
SW	1.3	2.9	3.1	.9	.2							8.3	7.1
WSW	.8	1.4	1.2	.5								3.5	6.5
W	.8	1.3	.7	.3	.0							3.2	5.9
WNW	.8	1.5	.6	.6								3.3	5.3
NW	2.1	4.3	2.2	.7	.1							9.4	5.5
NNW	2.0	4.6	2.4	.3	.0							9.4	5.7
VARBL													
CALM												18.1	
	20.6	38.7	18.6	5.2	.6	.1						100.0	5.7

TOTAL NUMBER OF OBSERVATIONS 1313

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/AC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.7	10.7	3.2	.2	.1							18.9	5.1
NNE	1.8	3.3	.7	.1								5.9	4.7
NE	1.9	2.0	.3	.1								4.4	4.3
ENE	.4	.8	.0									1.2	3.9
E	1.1	.7	.2	.0								1.9	4.0
ESE	.3	.4	.0									.7	4.2
SE	.8	.6	.2									1.6	3.9
SSE	.5	.7	.1	.0								1.4	4.3
S	1.2	2.3	1.1	.5	.0							5.0	5.9
SSW	1.3	1.9	2.9	.5	.1							7.1	7.3
SW	1.1	3.0	5.2	2.1	.5	.0						11.8	8.3
WSW	.3	1.3	.9	.5	.1							3.3	7.3
W	.0	.5	.6	.1	.1							1.9	6.2
WNW	.6	.6	.3	.0								1.5	5.2
NW	1.5	1.9	1.4	.2								5.2	5.8
NNW	2.0	4.1	1.7	.3								8.2	5.3
VARBL													
CALM												20.0	
	20.0	35.0	18.9	5.2	.8	.0						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 2366

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

**SURFACE WINDS**

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

0300-0800  
HOURS (L & T)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.3	14.6	3.0	.4								25.2	4.7
NNE	2.7	3.3	.7	.3								7.0	4.6
NE	2.3	1.9	.4		.0							4.6	3.9
ENE	.6	.6	.0									1.3	3.7
E	.8	.9										1.8	3.8
ESE	.5	.3	.1									.8	4.1
SE	.9	.5	.0									1.5	3.4
SSE	.4	.3	.4									1.4	4.9
S	1.2	1.9	1.1	.2								4.4	5.5
SSW	.8	1.9	2.8	.9	.2							6.5	7.6
SW	1.1	3.0	2.8	.7	.1							7.7	6.7
WSW	.6	.8	.4	.3								2.2	6.2
W	.4	.7	.3	.1								1.5	5.4
WNW	.6	.5	.4	.3								1.8	4.6
NW	1.5	2.0	.9									4.4	4.7
NNW	1.9	4.4	1.6	.0								7.9	4.9
VARBL													
CALM												20.0	
	23.8	37.9	14.9	3.0	.3							100.0	4.1

TOTAL NUMBER OF OBSERVATIONS 2356

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 APR  
STATION STATION NAME YEARS NORTH  
ALL WEATHER  
CLASS  
CONDITION  
0600-0800  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.2	12.2	2.3	.3	.0							22.3	4.7
NNE	2.7	3.7	.8	.6	.2							8.0	5.3
NE	2.9	2.3	.5	.0								5.6	4.1
ENE	1.2	.8	.2									2.2	3.7
E	2.4	1.2	.2									3.7	3.4
ESE	.7	.3	.2	.0								1.3	4.3
SE	.8	.6	.3	.0								1.8	4.4
SSE	.5	.5	.0	.0	.0							1.1	5.0
S	.9	1.1	1.2	.2								3.4	5.8
SSW	1.0	1.3	2.2	1.1								5.8	7.3
SW	1.0	1.8	2.6	1.1	.1							6.6	7.5
WSW	.4	.6	.5	.2	.1							1.8	6.9
W	.4	.5	.1	.3								1.4	6.3
WNW	.4	.3	.2	.1								1.2	5.1
NW	1.4	1.5	.3	.3		.0						3.6	5.2
NNW	1.9	4.1	1.2	.2								7.4	4.9
VARBL													
CALM												22.7	
	25.7	33.6	12.8	4.6	.5	.0						100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 2366

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

**SURFACE WINDS**

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 APR  
STATION STATION NAME YEARS  
ALL WEATHER  
CLASS  
0900-1100  
HOURS (L S T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.1	.8	.2	.1							3.5	5.5
NNE	.6	1.0	.5	.5	.3	.0						2.9	2.2
NE	2.1	2.7	.5	.3								5.5	4.7
ENE	2.0	1.7	.9	.3								4.3	4.8
E	4.4	5.3	1.9	.5								12.0	4.9
ESE	1.6	2.7	.7	.1								5.2	4.8
SE	2.3	3.6	1.0	.1								7.0	4.7
SSE	1.1	1.8	.4									3.3	4.3
S	2.1	2.9	1.3	1.1	.0							7.5	6.2
SSW	1.0	2.2	3.0	2.7	.3	.1						9.3	8.9
SW	1.4	2.2	2.4	3.2	.6	.1						9.9	9.2
WSW	.4	.7	.5	1.0	.4							3.0	10.1
W	.7	.5	.2	.3	.1							1.8	6.2
WNW	.3	.3	.1	.3	.0	.0						1.1	8.3
NW	.4	.3	.3	.2	.0							1.2	6.8
NNW	.3	.4	.1	.1								.9	3.0
VARBL													
CALM												21.1	
	22.0	29.2	14.5	10.9	2.0	.3						100.0	3.1

TOTAL NUMBER OF OBSERVATIONS 2365

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-72 APR  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
1200-1400  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.7	.3									2.1	4.3
NNE	.3	.4	.3	.1								1.2	6.2
NE	.8	1.2	.7	.3								3.0	5.6
ENE	.5	.9	.5	.1								2.0	5.4
E	1.6	1.9	1.2	.3	.0							5.1	5.5
ESE	1.0	1.6	1.4	.2	.0							4.3	6.0
SE	2.5	3.6	1.7	.1	.0							7.9	5.0
SSE	.6	2.7	1.1	.3	.0							4.9	5.2
S	2.1	5.6	4.3	1.7	.1							13.5	6.5
SSW	.8	3.6	4.8	3.6	.8	.2						13.8	9.4
SW	1.4	4.4	5.2	4.1	1.3	.4	.0					15.9	9.5
WSW	.6	1.5	2.1	1.6	.5	.2	.0					6.7	9.8
W	.2	1.1	1.3	.5	.2	.0						4.0	7.3
WNW	.5	.5	.5	.6	.3							2.2	2.9
NW	.5	.6	.3									1.5	4.6
NNW	.3	.4		.1								.8	4.5
VARBL													
CALM												10.2	
	15.9	30.5	25.5	13.7	3.3	.8	.1					100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 2364

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

20111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 51-72 YEARS APR MONTH  
ALL WEATHER CLASS 1500-1700 HOURS (L S T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.0	1.0	.3	.1	.0							2.0	5.3
NNE	.3	.3	.2	.1								1.1	6.3
NE	.3	.6	.5	.0	.0	.0						1.5	6.6
ENE	.1	.5	.2	.0								.8	5.9
E	1.2	1.5	.6	.0								3.3	4.8
ESE	.2	.3	.4									1.1	5.8
SE	1.1	1.5	1.0	.0								3.6	5.2
SSE	.6	1.5	.8	.1								2.9	5.6
S	.6	4.0	5.4	2.2	.4							13.5	7.7
SSW	.8	2.8	5.9	5.2	1.0	.1		.0				15.7	10.1
SW	1.3	4.1	7.5	6.8	1.8	.8	.1					22.5	10.5
WSW	.6	2.0	3.9	4.0	1.4	.3	.0					12.2	11.0
W	.8	1.3	2.0	2.2	.3	.0						6.5	9.1
WNW	.3	.5	.6	.9	.3	.1						2.7	10.6
NW	.7	.6	.5	.4	.1	.1						2.4	7.9
NNW	.4	.1	.3	.2								1.0	6.1
VARBL													
CALM												6.9	
	10.9	22.7	30.1	22.3	3.3	1.7	.1	.0				100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 2362

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/AC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.0	.3	.2	.0							2.8	5.3
NNE	.4	.3	.3	.2								1.2	6.3
NE	.0	.6	.3	.1								1.7	5.4
ENE	.3	.4	.2	.0								.9	5.2
E	.5	.7	.2	.0								1.4	4.8
ESE	.4	.3	.0	.1								.9	5.1
SE	.7	.8	.2	.1	.0	.0						1.8	5.5
SSE	.5	.8	.3	.0								1.6	4.8
S	2.6	5.2	2.8	.7	.1	.0						11.4	6.0
SSW	1.4	5.4	6.0	2.4	.5	.3						16.0	8.0
SW	2.6	5.8	7.7	4.7	.9	.1						22.0	8.5
WSW	.8	3.5	3.6	2.6	.7	.2						11.3	8.9
W	.9	3.1	2.0	1.1	.3							7.5	7.2
WNW	.5	.9	1.3	.8	.3	.0						3.8	8.5
NW	.8	1.1	.8	.3	.1							3.1	6.2
NNW	.3	.6	.3	.1	.0							1.3	6.0
VARBL													
CALM												11.5	
	14.5	30.6	26.3	13.5	2.9	.7						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS 2362



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

## SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	4.7	1.9	.2								10.0	4.8
NNE	1.0	1.3	.3	.2								2.7	4.7
NE	1.3	1.0	.4	.1								2.7	4.6
ENE	.5	.4	.1									1.0	4.0
E	.9	.7	.2	.0								1.8	4.0
ESE	.4	.4	.1	.1								1.0	5.4
SE	.6	.3	.2	.0								1.2	4.6
SSE	.6	.5	.1									1.2	3.8
S	1.4	2.6	1.1	.5	.0	.0						5.7	6.0
SSW	1.1	2.9	2.9	1.1	.1							8.1	7.2
SW	2.2	6.8	6.3	2.7	.5							18.2	7.5
WSW	1.1	2.0	1.9	1.0	.2	.1						6.2	7.2
W	1.8	2.8	.8	.4		.0						5.8	5.4
WNW	.9	1.6	.8	.3	.0							3.6	5.8
NW	1.4	2.5	1.6	.7	.0							6.3	6.1
NNW	1.5	3.2	1.3	.1								6.1	5.2
VARBL													
CALM												18.2	
	19.8	33.3	20.1	7.4	1.0	.2						100.0	5.0

TOTAL NUMBER OF OBSERVATIONS 2369

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

## SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.2	6.7	2.0	.2								12.1	4.9
NNE	1.6	2.1	.7	.0	.0							4.4	4.8
NE	1.7	2.1	.3	.1								4.2	4.3
ENE	.4	1.3	.4	.0								2.1	5.0
E	.9	.9	.0									1.8	3.5
ESE	.4	.4	.0									.9	3.7
SE	.8	.9	.3	.0								2.0	4.7
SSE	.6	.7	.1	.1								1.5	4.8
S	2.5	3.5	1.7	.3								8.0	5.1
SSW	1.4	4.1	2.2	1.7	.1							12.4	7.3
SW	2.4	5.2	8.4	2.9	.1	.1						19.1	7.6
WSW	.6	1.7	1.7	.5								4.5	6.9
W	.9	1.1	.5	.2								2.6	5.2
WNW	.3	.4	.1	.2								.9	6.1
NW	1.3	1.4	.9	.2								3.8	5.5
NNW	.9	1.6	1.2	.1								3.7	5.7
VARBL													
CALM												15.9	
	19.8	33.9	23.6	6.6	.2	.1						100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 2500

1  
DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

0300-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.9	9.3	2.6	.1	.0	.0						19.0	4.7
NNE	2.2	2.3	.4	.1		.0						5.1	4.4
NE	2.4	2.0	.4	.0								4.8	4.1
ENE	.8	.9	.2									2.0	4.1
E	.9	1.0	.3									2.2	4.2
ESE	.5	.4	.1									1.0	3.7
SE	.7	.6	.1									1.4	3.6
SSE	.6	.2	.2									1.0	3.9
S	1.9	2.9	1.8	.2								6.9	5.4
SSW	1.2	2.4	3.1	1.0	.1							7.9	7.1
SW	1.9	4.2	4.4	.8	.1							11.4	6.7
WSW	.8	.8	.6	.2								2.4	5.3
W	.7	.6	.4	.1								1.8	4.8
WNW	.6	.5	.2									1.3	4.1
NW	2.0	1.6	.4	.2								4.1	4.3
NNW	1.9	3.4	1.1	.1								6.3	4.9
VARBL													
CALM												21.2	
	26.1	33.1	16.4	2.9	.2	.1						100.0	4.1

TOTAL NUMBER OF OBSERVATIONS 2499

1  
DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 YEARS MAY MONTH  
0600-0800 HOURS (L.S.T.)  
ALL WEATHER CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.6	9.4	2.8	.2	.0							19.1	4.6
NNE	3.0	3.3	.5	.2	.2	.1						7.2	4.9
NE	5.0	2.6	.5	.2								8.3	3.7
ENE	2.0	1.5	.1	.1								3.7	3.7
E	2.8	1.9	.4	.1								5.3	3.9
ESE	.6	.7	.1									1.6	4.1
SE	1.0	.3	.2	.0								1.7	3.7
SSE	.5	.5	.0									1.0	3.7
S	1.1	1.2	.7	.1								3.0	4.9
SSW	.7	1.3	2.8	1.4	.0							6.2	8.0
SW	1.3	1.8	2.5	1.0	.2	.0						6.9	7.4
WSW	.3	.4	.4	.2								1.3	6.9
W	.6	.6	.1									1.2	3.7
WNW	.6	.2	.1	.0	.0							1.0	4.5
NW	1.4	1.2	.3	.1								3.0	4.2
NNW	1.6	2.2	.9	.1								4.9	4.8
VARBL													
CALM												24.6	
	29.3	29.4	12.4	3.7	.4	.1						100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 2494

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

0900-1100  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.7	.1	.0	.0							1.6	4.5
NNE	.7	.3	.4	.4	.0	.0						1.9	6.9
NE	2.4	2.0	.7	.3	.1							5.5	5.1
ENE	1.4	2.3	.8	.1	.1							4.7	5.2
E	4.3	4.5	1.2	.4	.0							10.4	4.6
ESE	1.9	2.2	1.0	.4								8.5	5.3
SE	3.3	3.8	1.3	.1								8.5	4.5
SSE	1.6	2.1	.8	.1								4.6	4.6
S	3.3	4.9	2.1	.6	.0							10.9	5.3
SSW	1.8	2.8	3.8	1.9	.2							10.4	7.5
SW	2.2	2.9	3.4	2.2	.3							11.0	7.5
WSW	.6	.4	.6	.5	.0							2.2	7.3
W	.8	.5	.2	.1	.0							1.6	5.0
WNW	.4	.2	.3	.1								1.0	5.5
NW	.4	.3	.1	.1								.8	5.0
NNW	.2	.3	.1									.6	4.2
VARBL													
CALM												18.8	
	25.8	30.2	15.9	7.3	.9	.0						100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 2492

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PJENIX 42-46, 51-72 MAY  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
1200-1400  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.3	.3	.1	.0							1.3	5.4
NNE	.4	.3	.1	.1	.0							1.1	5.5
NE	.0	.7	.6	.1								2.0	5.7
ENE	.6	.7	.6	.3								2.2	6.5
E	1.2	1.5	1.4	.4								4.6	6.1
ESE	.5	1.3	1.0	.2	.0							3.1	6.3
SE	1.5	3.6	1.7	.1								6.9	5.4
SSE	.8	1.9	1.1	.3	.1							4.2	6.1
S	2.6	5.0	4.6	1.4	.1							13.7	6.7
SSW	1.2	3.6	5.7	3.4	.4	.0	.0					14.4	8.6
SW	2.7	5.3	7.4	5.5	.6	.1						21.6	8.5
WSW	.9	2.4	3.0	1.8	.2	.1						5.4	8.4
W	1.1	1.6	1.4	.5	.1							4.8	6.3
WNW	.2	.4	.4	.2								1.2	7.2
NW	.8	.5	.4	.1	.0	.1						1.8	6.0
NNW	.3	.2	.0									.3	4.1
VARBL													
CALM												7.9	
	16.1	29.5	29.9	14.5	1.8	.3	.0					100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 2497

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

1500-1700  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.2	.6	.2									1.0	5.1
NNE	.2	.1	.2	.1								.7	6.4
NE	.4	.5	.4	.0	.0							1.4	5.6
ENE	.3	.4	.1	.1								.9	5.1
E	.6	.6	.4	.1	.0							1.7	5.5
ESE	.4	.5	.5	.2	.1		.0					1.7	7.2
SE	.6	1.0	1.0	.2	.0							2.8	6.1
SSE	.4	1.0	.7	.0								2.2	5.8
S	1.5	3.2	4.1	1.5	.2							10.3	7.4
SSW	.7	2.6	7.2	4.7	.8							16.1	9.6
SW	1.8	5.7	10.9	9.8	2.6	.2						31.1	10.0
WSW	.5	2.0	4.5	5.2	1.3	.2	.1					13.6	11.0
W	1.1	2.0	2.2	1.3	.4							7.0	8.0
WNW	.2	.4	.6	.6	.1							1.9	9.3
NW	.4	.8	.5	.3	.1	.0						2.0	7.6
NNW	.2	.2	.0	.1								.6	5.1
VARBL													
CALM												4.9	
	9.7	21.3	33.6	24.2	5.7	.4	.1					100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 2694

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.6	.3	.1								1.4	5.4
NNE	.6	.3	.1	.1	.0							1.0	5.3
NE	.4	.4	.1		.0							1.0	5.0
ENE	.0	.2	.1	.1								.4	8.0
E	.5	.3	.2	.0								1.0	4.5
ESE	.1	.2	.2	.2								.6	8.5
SE	.9	.5	.4	.2								2.0	5.5
SSE	.4	.3	.3			.0						1.1	5.6
S	1.7	2.8	2.1	.5								7.2	5.9
SSW	1.1	4.4	5.6	2.7	.4							15.1	8.1
SW	2.4	7.5	11.7	7.5	1.9	.2						31.3	9.0
WSW	1.0	3.9	6.3	5.6	.8			.0				18.1	9.4
W	1.1	3.5	2.7	.9	.3							8.6	7.2
WNW	.4	1.2	.6	.3	.1							2.5	7.0
NW	.3	.4	.4	.4	.1							1.6	8.3
NNW	.1	.2	.2	.0	.0							.6	6.9
VARBL													
CALM												6.6	
	11.4	26.7	32.6	13.6	3.7	.2		.0				100.0	7.6

TOTAL NUMBER OF OBSERVATIONS 2498



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/ETAC

## SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

MAY  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	1.8	1.4	.1								4.9	5.3
NNE	.5	.7	.2	.2	.0							1.8	5.7
NE	.8	.7	.1	.1	.0							1.8	4.9
ENE	.5	.3	.1									.9	4.1
E	.6	.4	.2									1.3	4.1
ESE	.3	.1	.1									.6	4.3
SE	.6	.4	.3	.0	.0							1.3	5.4
SSE	.3	.2	.2									.6	4.8
S	1.7	2.0	1.1	.2	.1							5.1	5.4
SSW	2.0	3.5	4.3	1.4								11.2	7.0
SW	2.2	7.4	11.4	3.6	.2							24.8	7.6
WSW	1.6	4.3	4.8	1.6	.2	.1						12.5	7.4
W	1.9	5.9	1.9	.2	.1	.0						10.0	5.5
WNW	.5	1.7	.7	.2								3.1	5.7
NW	1.3	1.2	1.2	.2	.1	.1						4.1	6.2
NNW	1.0	1.4	.3	.2								2.9	4.7
VARBL													
CALM												13.1	
	17.6	32.0	28.3	8.0	.8	.2						100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 2494

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.4	3.7	1.3	.2								7.6	4.9
NNE	1.2	1.2	.4	.1								3.1	4.2
NE	2.0	1.8	.2									4.0	3.6
ENE	.5	.6	.0									1.2	3.6
E	1.4	.8	.5	.0								2.7	4.4
ESE	.4	.6	.2	.0								1.2	4.9
SE	1.0	.8	.2	.0	.0							2.1	4.3
SSE	.8	.6	.1		.0							1.6	4.4
S	2.1	3.1	1.7	.1								7.1	5.1
SSW	2.0	3.9	6.0	2.1	.1							14.1	7.4
SW	2.2	5.3	9.0	3.7	.2							20.4	7.9
WSW	1.0	2.1	1.8	.5	.1							5.5	6.9
W	.9	1.0	.5	.1								2.4	4.9
WNW	.7	.4	.1									1.2	3.7
NW	.9	1.6	.7	.1								3.3	5.1
NNW	.6	1.3	.5	.1								2.6	5.3
VARBL													
CALM												19.8	
	20.4	29.1	23.1	7.0	.5							100.0	4.9

TOTAL NUMBER OF OBSERVATIONS 2383

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

0300-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.7	7.1	1.6	.1								14.4	4.3
NNE	1.9	2.3	.3	.1	.1							4.7	4.3
NE	2.9	1.6	.1		.0							4.7	3.6
ENE	.6	.5	.1	.1								1.3	4.5
E	1.1	1.1	.0	.1	.0							2.4	4.3
ESE	.3	.4	.1									.8	4.3
SE	.9	.6	.1									1.6	3.6
SSE	.8	.8	.1	.0								1.8	4.0
S	1.8	2.5	1.4	.2								5.8	5.2
SSW	1.3	2.6	3.5	.8								8.3	6.9
SW	2.0	3.9	4.3	1.1	.1							11.5	6.8
WSW	.5	1.3	1.0	.2								3.0	6.1
W	1.5	1.1	.3									2.9	3.9
WNW	1.0	.2	.0									1.4	3.2
NW	2.4	1.8	.4	.0								4.7	4.0
NNW	2.2	2.9	.8		.0							6.0	4.4
VARBL													
CALM												24.5	
	27.0	30.9	14.1	2.2	.3							100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 2382

1  
DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 JUN  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
0600-0800  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	7.4	7.0	.3	.0								15.2	3.3
NNE	2.9	2.7	.4	.3								6.3	4.3
NE	4.9	2.8	.3		.0							8.0	3.5
ENE	2.2	1.4	.3									3.9	3.6
E	3.7	1.9	.3	.1								6.0	3.5
ESE	1.2	.7	.1	.0								2.3	3.6
SE	1.5	1.2	.0									2.7	3.4
SSE	.5	.6	.0	.0								1.2	4.5
S	1.0	1.8	.7	.1								3.6	4.8
SSW	.5	1.6	2.2	.3								4.9	7.3
SW	1.4	1.9	2.4	.4								6.0	6.3
WSW	.5	.3	.6	.1								1.4	5.8
W	.5	.5	.3									1.3	4.4
WNW	.5	.5	.1									1.1	4.0
NW	1.6	1.3	.3									3.1	3.8
NNW	2.3	2.2	.3	.1								5.0	4.2
VARBL													
CALM												28.4	
	32.4	28.5	9.0	1.7	.0							100.0	3.1

TOTAL NUMBER OF OBSERVATIONS 2382

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

**SURFACE WINDS**

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

0900-1100  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	.5	.3	.2								2.0	4.6
NNE	.3	.5	.3	.0								1.0	5.7
NE	1.7	1.7	.3									3.7	3.9
ENE	1.1	1.6	.3	.0	.0							3.1	4.4
E	4.2	3.1	.9	.3								8.6	4.2
ESE	2.0	2.1	.9	.1								5.0	4.6
SE	3.6	3.9	1.3	.1								8.9	4.5
SSE	1.8	2.3	.7									5.0	4.4
S	3.9	4.8	2.5	.5								11.7	5.2
SSW	1.8	3.9	3.5	1.8	.0							11.0	7.0
SW	2.7	3.8	3.4	1.7								11.6	6.6
WSW	.8	1.2	.8	.2								3.1	5.9
W	1.0	.6	.3	.1								1.9	4.3
WNW	.3	.0	.1									.4	4.4
NW	.7	.1	.1	.0								1.0	3.0
NNW	.4	.2	.1									.7	3.5
VARBL													
CALM												21.2	
	27.2	30.6	15.9	5.2	.1							100.0	4.1

TOTAL NUMBER OF OBSERVATIONS

2392

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 JUN  
STATION STATION NAME YEARS NORTH  
ALL WEATHER 1200-1400  
CLASS HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.3	.1	.1								1.0	4.4
NNE	.2	.3	.0									.6	4.4
NE	.4	.4	.2									1.0	4.5
ENE	.2	.4	.3									1.0	5.4
E	.7	1.2	.5	.1								2.6	5.3
ESE	.4	1.2	.7	.0								2.3	6.0
SE	2.3	2.9	1.3	.1		.0						6.8	5.1
SSE	.9	2.9	1.6	.3								5.8	5.9
S	2.6	5.2	5.2	1.3	.1							14.4	6.6
SSW	1.5	5.0	6.4	2.9	.1							13.9	7.8
SW	3.1	6.5	8.3	3.7	.4	.0						22.2	7.6
WSW	.9	3.2	3.1	1.6	.1							8.9	7.6
W	1.0	2.4	1.4	.4	.0							5.2	6.0
WNW	.4	.5	.2	.0								1.1	5.2
NW	.7	.9	.4	.1								2.0	5.0
NNW	.2	.3	.0	.0								.6	4.9
VARBL													
CALM												8.7	
	16.1	33.6	30.0	10.7	.8	.1						100.0	6.2

TOTAL NUMBER OF OBSERVATIONS 2382

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-72 JUN  
STATION STATION NAME YEARS MONTH  
ALL WEATHER 1500-1700  
CLASS HOURS (L S T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.5	.1	.0								1.0	4.8
NNE	.2	.1	.0	.1								.4	6.7
NE	.3	.2	.1									.7	4.9
ENE	.1	.0	.2	.2								.5	9.2
E	.4	.4	.1	.0								.9	4.7
ESE	.1	.1	.3	.1								.5	8.5
SE	.6	.6	.5	.2								1.9	5.8
SSE	.3	1.0	.9	.1								2.3	6.6
S	1.3	3.7	4.2	2.1	.1							11.4	7.6
SSW	.8	2.9	8.0	5.7	.5							17.9	9.6
SW	2.6	5.6	12.2	10.6	1.8	.3						33.0	9.7
WSW	.5	2.4	5.2	4.5	.8	.0						13.5	10.0
W	.6	1.9	3.6	1.9	.1	.0						8.1	8.4
WNW	.2	.5	.4	.2								1.3	7.2
NW	.3	.5	.2	.1	.0							1.2	6.4
NNW	.3	.3	.1	.1	.1							.8	6.9
VARBL													
CALM												4.2	
	8.8	20.9	36.2	26.0	3.4	.4						100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 2385

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	.2	.2	.2	.2	.0						1.1	9.4
NNE	.1	.1	.2	.1	.2							.7	10.4
NE	.2	.2		.0								.4	3.1
ENE	.0	.1	.1	.0								.3	7.4
E	.2	.4	.2	.1	.0							.9	6.4
ESE	.2	.2	.1		.0							.5	3.9
SE	.4	.6	.2	.0		.0						1.3	3.6
SSE	.3	.3	.2	.1								.9	3.2
S	1.4	2.5	2.3	.8	.1	.0	.0					7.2	7.0
SSW	.8	3.9	6.7	4.3	.3							13.9	8.8
SW	2.6	7.9	14.3	7.7	.9	.2						33.7	8.7
WSW	.8	4.1	8.4	4.7	.3	.2	.0					13.5	9.0
W	1.1	3.9	3.9	1.0	.1							10.1	6.9
WNW	.2	.7	.8	.3	.0							2.0	7.4
NW	.4	.4	.3	.2								1.2	6.0
NNW	.3	.2	.1	.1	.1		.0					.8	8.0
VARBL													
CALM												4.6	
	9.2	25.8	38.0	19.5	2.2	.5	.1					100.0	7.9

TOTAL NUMBER OF OBSERVATIONS 2384



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

**SURFACE WINDS**

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.3	.6		.1							3.4	4.9
NNE	.5	.5	.5	.1	.1							1.7	6.5
NE	.7	.3	.2									1.2	3.9
ENE	.1	.3	.1	.0								.6	5.5
E	.4	.4	.1									1.0	4.3
ESE	.3	.3	.1	.2	.0							.9	7.0
SE	.5	.5	.4	.1		.0						1.6	6.3
SSE	.2	.3	.1	.1	.0							.8	6.6
S	1.3	2.1	.8	.1								4.3	4.9
SSW	1.2	3.4	4.4	2.1	.1							11.2	7.6
SW	3.8	7.9	11.7	4.1	.5	.0						28.1	7.6
WSW	2.0	5.2	4.4	1.8	.1							13.4	6.6
W	2.5	5.4	1.5	.3	.0							9.6	5.0
WNW	.8	1.3	.6	.0								2.8	5.0
NW	1.2	2.0	1.0	.1								4.2	3.3
NNW	.8	.8	.2									1.8	4.0
VARBL													
CALM												13.6	
	17.7	32.0	26.5	9.1	1.0	.1						100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 2385

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.0	3.2	1.6	.2	.1							7.1	5.5
NNE	.8	1.5	.5	.1								2.9	3.0
NE	2.3	1.4	.7	.3								4.7	4.6
ENE	.7	1.0	.3	.1								2.1	5.2
E	1.7	2.1	1.0	.3			.0					5.2	5.6
ESE	.6	.7	.9	.4	.1		.0					2.8	7.4
SE	1.6	1.6	1.0	.5	.1							4.7	6.0
SSE	.6	.7	.7	.0								2.1	5.4
S	1.1	2.5	2.2	.3	.0							6.2	6.2
SSW	.9	2.3	3.4	1.6	.3							8.6	8.0
SW	2.3	4.3	6.8	3.6	.2	.1	.0					17.5	8.2
WSW	.9	1.6	1.8	.7	.1	.0						5.2	7.4
W	.8	1.6	.8	.2	.0							3.8	5.7
WNW	.4	.6	.2	.0								1.3	4.8
NW	1.5	1.3	.9	.2	.0							3.8	3.2
NNW	.6	1.5	.9	.1								3.0	5.7
VARBL													
CALM												19.5	
	18.7	27.9	23.8	8.9	1.0	.2	.1					100.0	5.3

TOTAL NUMBER OF OBSERVATIONS

2442

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKA AFB ARIZONA/PHOENIX 42-46, 51-72 JUL  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
0300-0500  
HOURS (L & T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.1	5.0	1.2	.1								9.5	4.5
NNE	1.9	1.8	.4	.3								4.1	4.1
NE	3.0	2.6	.6									6.2	4.1
ENE	.6	1.0	.5									2.1	4.8
E	1.4	2.1	1.1	.2								4.8	5.1
ESE	1.1	.6	.3									2.0	3.9
SE	1.4	1.0	.2	.2	.1							2.8	5.0
SSE	.6	1.0	.2	.0								1.7	4.3
S	1.7	2.8	1.4	.2								6.1	5.2
SSW	1.7	2.2	3.1	1.1	.0							8.2	6.8
SW	2.3	3.5	4.4	1.8	.2							12.3	7.2
WSW	.7	1.2	.6	.3	.1							2.9	6.4
W	1.1	1.4	.5	.1	.0							3.1	4.9
WNW	.7	.6	.1									1.5	3.8
NW	1.4	1.6	.5									3.3	4.3
NNW	1.7	2.3	.6	.0								4.6	4.5
VARBL													
CALM												24.8	
	24.4	30.5	15.6	4.2	.5							100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 2413

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 51-72 YEARS JUL NORTH  
ALL WEATHER CLASS 0600-0800 HOURS (LST)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.6	5.2	1.6									11.4	4.3
NNE	2.1	1.7	.5									4.2	3.9
NE	4.0	2.9	.5	.1								7.5	3.8
ENE	1.8	1.5	.2									3.5	3.8
E	2.4	1.8	.5	.1								4.8	4.0
ESE	.8	1.0	.6									2.4	4.7
SE	1.2	1.1	.2									2.5	4.0
SSE	.6	.7	.1									1.5	4.1
S	1.9	2.2	1.1	.1								5.3	5.0
SSW	.7	1.8	2.6	1.0	.1	.0						6.3	7.6
SW	1.8	2.2	3.0	1.9	.0							8.9	7.5
WSW	.8	1.1	1.0	.4								3.3	6.1
W	1.0	1.0	.3	.0								2.3	4.3
WNW	.6	.4	.0									1.0	3.4
NW	1.6	1.3	.2	.1								3.1	3.8
NNW	1.4	2.4	.4	.0								4.3	4.2
VARBL													
CALM												27.8	
	27.2	28.3	12.9	3.7	.1	.0						100.0	3.6

TOTAL NUMBER OF OBSERVATIONS 2492

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-72 JUL  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
0900-1100  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.6	.4									3.1	4.4
NNE	.7	1.3	.2									2.2	4.3
NE	2.2	1.6	.4									4.1	3.9
ENE	1.2	1.5	.3									3.0	3.1
E	2.0	3.3	1.2	.3								6.8	5.2
ESE	.9	1.6	1.1	.3	.0							3.9	5.9
SE	2.4	2.4	1.2	.0								6.0	4.5
SSE	1.2	1.7	1.2	.0								4.1	5.2
S	2.3	4.6	2.7	.6								10.2	5.7
SSW	1.2	3.1	4.3	2.7	.1							11.5	7.9
SW	3.1	4.4	4.1	2.5	.2							14.3	7.1
WSW	1.5	1.3	1.1	.4	.1							4.4	5.9
W	1.1	1.4	.3		.0							2.9	4.3
WNW	.5	.5	.1									1.1	3.7
NW	.9	.4		.0								1.4	3.4
NNW	.5	.2	.1	.0								.8	4.4
VARBL													
CALM												20.2	
	23.0	30.9	18.5	7.0	.4							100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 2483

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.6	.3	.0								1.5	5.1
NNE	.4	.5	.2	.0								1.1	4.9
NE	.8	.8	.2	.0								1.8	4.6
ENE	.1	.6	.2									.8	5.3
E	1.2	1.4	.8	.2								3.6	5.3
ESE	.5	1.0	.6	.2								2.2	6.1
SE	1.3	2.2	1.4	.1								5.0	5.4
SSE	.9	2.0	.9	.3	.0							4.2	5.7
S	2.1	6.2	6.0	1.5								15.8	6.6
SSW	1.2	4.4	6.9	4.9	.2							17.6	8.7
SW	3.1	7.0	7.7	2.9	.3	.0						21.0	7.2
WSW	1.0	3.2	2.2	.5	.0							6.9	6.5
W	1.6	2.5	.9	.1								5.1	5.0
WNW	.5	.8	.3									1.5	4.4
NW	.4	.8	.4									1.6	5.1
NNW	.2	.3	.1									.6	4.7
VARBL													
CALM												9.7	
	15.7	34.3	28.9	10.8	.6	.0						100.0	6.0

TOTAL NUMBER OF OBSERVATIONS 2493

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46, 51-72 YEARS JUL MONTH  
1500-1700 HOURS (L.S.T.)  
ALL WEATHER CLASS  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.5	.4	.2	.1							1.5	6.8
NNE	.1	.2	.2	.2	.0							.7	9.2
NE	.5	.6	.1									1.2	4.3
ENE	.2	.2	.1	.1	.1							.7	7.9
E	.4	.4	.4	.0	.0	.0						1.2	6.6
ESE	.2	.4	.3	.1								1.0	6.4
SE	.8	1.1	1.0	.2								3.2	6.0
SSE	.6	1.2	1.2	.2								3.2	6.4
S	1.8	4.7	5.5	2.2	.0							2	7.4
SSW	1.2	3.8	7.7	7.8	.8	.0						4	9.6
SW	2.5	5.5	11.7	6.7	.8							27.1	8.8
WSW	.6	1.9	4.4	2.3	.1							9.3	8.8
W	1.2	2.1	2.4	1.0								6.6	6.8
WNW	.3	.6	.2									1.2	5.3
NW	.4	.8	.4	.2	.0							1.9	6.3
NNW	.2	.4		.2	.0							.8	6.7
VARBL													
CALM												4.6	
	11.3	24.4	36.1	21.4	2.1	.1						100.0	7.8

TOTAL NUMBER OF OBSERVATIONS 2495

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46,51-72  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.6	.8	.9	.3	.1	.0	.1				3.2	10.9
NNE	.1	.3	.6	.6	.3	.2	.1					2.1	13.0
NE	.7	.4	.7	.4	.2	.1						2.5	8.4
ENE	.4	.4	.2	.3	.2	.1						1.6	9.0
E	.9	.8	.4	.3	.0	.0						2.4	6.3
ESE	.1	.7	.4	.1	.2							1.5	7.7
SE	.9	1.2	1.1	.5			.0					3.7	6.8
SSE	.3	1.0	.7	.3		.0		.0				2.3	7.4
S	2.1	3.9	3.1	.8	.1							10.0	6.4
SSW	1.2	3.7	8.0	4.5	.2	.0	.0					17.8	8.7
SW	2.8	3.6	11.0	4.3	.3	.1	.0					24.2	8.1
WSW	.4	3.1	5.3	2.0	.0							10.8	8.1
W	.8	2.0	2.6	.6	.0							6.1	7.1
WNW	.2	.6	.5	.2								1.5	7.3
NW	.5	.6	.6	.4	.1							2.2	7.3
NNW	.2	.3	.4	.2	.1							1.1	8.5
VARBL													
CALM												6.6	
	12.2	25.2	36.4	16.4	2.1	.7	.2	.1				100.0	7.5

TOTAL NUMBER OF OBSERVATIONS

2488



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUL  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.7	1.3	.6	.1							4.8	6.6
NNE	.3	.5	.7	.6	.3	.0	.0					2.5	9.9
NE	1.3	1.1	.7	.6	.1	.0						3.8	6.6
ENE	.3	.7	.4	.1	.0							1.6	6.3
E	.6	.9	.6	.6	.2							2.9	7.7
ESE	.5	.5	.6	.4	.0	.1						2.2	7.9
SE	.8	1.3	1.9	.8	.2							5.1	7.6
SSE	.3	.5	.8	.3	.1							2.0	7.7
S	1.3	2.0	1.3	.2	.2	.0	.0					5.0	6.2
SSW	.5	2.8	3.0	1.3	.2	.0						8.0	8.0
SW	2.7	5.9	8.8	3.8	.5	.2						21.8	8.1
WSW	1.3	4.0	3.6	1.5	.4							10.8	7.5
W	1.8	4.3	1.7	.2	.1	.0						8.1	5.5
WNW	.9	1.2	.5	.1	.1							2.7	5.1
NW	.9	1.8	1.1	.3	.0	.0						4.1	6.2
NNW	.5	.8	.4	.4	.0							2.0	7.0
VARBL													
CALM												12.6	
	15.1	30.2	27.3	11.5	2.6	.5	.1					100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 2496

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.9	5.3	2.3	.3	.1							10.9	5.2
NNE	1.3	1.6	.8	.2	.1							4.2	5.3
NE	2.4	2.1	.7	.3								5.4	4.6
ENE	.8	.9	.4	.2								2.2	5.2
E	1.7	2.2	.7	.0	.0	.0						4.8	4.9
ESE	.7	.8	.8	.5	.0							2.8	6.8
SE	1.2	1.5	.7	.3	.2	.0						3.9	6.5
SSE	.5	.7	.5	.1		.0						1.8	6.1
S	1.7	2.0	1.2	.4		.0						5.3	5.6
SSW	1.1	1.8	2.3	.9								6.1	7.1
SW	2.1	3.4	5.1	2.4	.2							13.1	7.7
WSW	.8	.9	1.4	.8	.0							4.0	7.3
W	1.0	1.2	.7	.1								3.0	5.2
WNW	.6	.7	.2	.2		.0						1.7	5.8
NW	1.3	1.7	.5	.2		.0						3.7	5.2
NNW	1.1	1.5	.8	.3								3.7	5.8
VARBL													
CALM												23.2	
	21.0	28.5	19.2	7.2	.7	.2						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 2413

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

0300-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.3	7.7	1.9	.2								14.1	4.6
NNE	1.9	1.8	.4	.0								4.1	4.0
NE	3.4	2.1	.7	.1								6.4	4.1
ENE	.8	1.1	.2									2.2	4.3
E	1.9	1.7	.5	.2								4.4	4.8
ESE	.7	.6	.4	.1								1.7	5.2
SE	1.2	1.0	.2	.3	.0	.0						2.8	5.4
SSE	.5	.4	.2	.0								1.1	4.5
S	1.3	1.8	.8	.1								4.0	5.1
SSW	.8	1.7	1.7	.3	.1							4.6	6.6
SW	2.1	3.3	3.8	1.1	.2							10.5	5.8
WSW	.7	.9	1.0	.3								2.9	6.3
W	.8	.7	.2									1.7	4.0
WNW	.4	.7	.1	.0								1.3	4.7
NW	1.3	1.9	.5									3.9	4.7
NNW	1.6	3.2	.6									5.6	4.3
VARBL													
CALM												28.7	
	24.2	30.6	13.2	2.9	.3	.0						100.0	3.6

TOTAL NUMBER OF OBSERVATIONS 2411

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.1	0.2	1.5	.0								15.8	4.2
NNE	2.5	3.1	.6	.1								6.2	4.2
NE	4.5	3.0	.5									8.0	3.6
ENE	1.3	1.5	.1									2.9	3.9
E	2.1	1.7	.5	.0								4.4	4.3
ESE	1.2	1.0	.4	.0								2.5	4.4
SE	1.7	1.0	.6	.1								3.5	4.5
SSE	.6	1.0	.2									1.8	4.5
S	1.8	1.3	.5	.0	.1							3.8	4.5
SSW	.3	1.4	.9	.4								3.0	6.8
SW	1.8	2.0	1.8	.5	.1							6.3	6.4
WSW	.5	.7	.3	.3								1.8	6.4
W	.7	1.0	.2	.0								2.1	4.6
WNW	.5	.7	.2									1.3	4.0
NW	1.8	1.4	.3									3.5	3.9
NNW	1.2	2.8	.6									4.6	4.7
VARBL													
CALM												28.4	
	28.5	31.9	9.3	1.7	.2							100.0	3.3

TOTAL NUMBER OF OBSERVATIONS 2409

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 AUG  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
0900-1100  
HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.8	1.9	.4	.1								4.2	4.1
NNE	1.0	.8	.6	.1								2.5	4.0
NE	2.7	2.7	.5	.1								6.0	4.2
ENE	1.4	1.9	.9	.1								4.3	4.9
E	3.8	5.1	1.4	.2	.0							10.5	4.8
ESE	1.9	1.7	1.1	.3	.0							5.1	5.3
SE	3.2	3.4	1.2	.1	.0							8.0	4.8
SSE	1.1	1.7	.7	.1								3.7	5.1
S	3.2	2.9	1.5	.1	.0							7.8	4.8
SSW	1.0	2.5	2.4	.6								6.5	6.6
SW	1.9	3.4	3.1	1.2	.1							9.6	6.6
WSW	.9	.9	.7	.3								2.8	5.8
W	1.3	.7	.3	.1								2.5	4.5
WNW	.5	.2	.1									.9	3.7
NW	1.0	.6		.0								1.7	3.4
NNW	.4	.8	.2									1.4	4.6
VARBL													
CALM												22.7	
	27.2	31.3	15.1	3.6	.2							100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 2415

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 AUG  
STATION STATION NAME YEARS MONTH  
ALL WEATHER 1200-1400  
CLASS HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	.8	.2	.0								2.3	4.2
NNE	.2	.2	.2	.0								.7	5.2
NE	1.1	1.2	.4	.0								2.6	4.6
ENE	.4	.8	.2	.1								1.5	5.1
E	1.8	1.4	1.4	.3								5.0	5.7
ESE	.6	1.8	1.4	.1								4.0	6.0
SE	1.9	2.6	1.9	.4	.0							6.9	5.8
SSE	1.0	2.8	1.4	.0								5.2	5.3
S	3.6	6.0	4.4	1.0								15.1	5.9
SSW	1.4	3.4	3.9	1.6	.0							10.3	7.3
SW	2.3	7.7	5.3	1.3	.1	.0						17.3	6.3
WSW	1.2	2.0	1.4	.3	.1							5.0	6.0
W	1.9	2.7	1.4	.1								6.1	5.1
WNW	.4	.5	.4	.0								1.4	5.1
NW	1.1	1.2	.3	.0								2.6	4.4
NNW	.5	.5	.2	.1								1.2	4.7
VARBL													
CALM												12.6	
	21.1	35.7	24.6	5.7	.3	.0						100.0	5.2

TOTAL NUMBER OF OBSERVATIONS 2416

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

28111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 AUG  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
1500-1700  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.0	.4	.2	.0							2.2	5.7
NNE	.3	.3	.4	.1	.0							1.1	6.3
NE	.7	1.0	.3	.1		.0		.0				2.2	6.1
ENE	.3	.6	.4					.0				1.3	6.2
E	.7	.9	.4	.1	.0							2.2	5.7
ESE	.3	.7	.6	.2	.1							1.8	7.2
SE	1.1	1.9	1.5	.1			.0					4.7	6.0
SSE	.5	2.2	1.9	.7	.0	.0						5.3	7.1
S	2.5	6.7	5.5	1.9	.1							16.8	6.8
SSW	1.2	3.6	7.0	4.6	.3	.1	.0					16.8	9.1
SW	2.8	6.0	8.9	4.3	.3	.0						22.4	8.0
WSW	.9	1.8	2.4	1.2	.2							6.4	7.8
W	1.7	1.9	1.2	.5								5.3	5.7
WNW	.2	.7	.2	.1		.0						1.3	6.5
NW	.5	.7	.2	.4	.2							1.9	7.4
NNW	.2	.4	.3	.1	.1	.0						1.1	7.6
VARBL													
CALM												7.3	
	14.5	30.3	31.5	14.6	1.4	.3	.1	.1				100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 2416

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 AUG  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
1800-2000  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.3	1.1	.4	.5	.3	.1					4.5	9.7
NNE	.3	.5	.3	.1	.5	.2	.0					1.9	11.2
NE	.8	1.0	1.0	.2	.1	.2						3.3	7.5
ENE	.3	.6	.4	.2	.1	.0	.0					1.8	8.9
E	1.1	1.2	.5	.3	.2	.0						3.4	6.6
ESE	.3	.9	.6	.2	.0							2.1	6.8
SE	1.6	1.7	1.4	.5	.1							5.1	6.1
SSE	1.0	1.3	1.1	.2	.0							3.6	6.0
S	3.6	4.7	3.0	.7	.2							12.1	5.7
SSW	1.4	4.4	6.5	2.3	.2		.1					14.9	7.9
SW	3.6	5.7	7.1	3.4	.2							20.0	7.4
WSW	.9	2.4	2.5	.7	.1	.0	.1					6.7	7.5
W	.8	1.9	.8	.5	.0							4.0	6.2
WNW	.2	.5	.5	.2	.1	.0						1.6	7.8
NW	.6	.5	.7	.7	.2	.0						2.7	8.5
NNW	.2	.4	.4	.2	.1	.1						1.6	9.5
VARBL													
CALM												10.7	
	17.6	29.0	27.4	11.0	2.6	1.0	.3					100.0	6.6

TOTAL NUMBER OF OBSERVATIONS 2416



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 5	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	2.9	1.7	.7	.1							7.2	6.2
NNE	.7	1.1	.8	.5	.1	.1	.0					3.4	7.8
NE	1.5	1.5	1.2	.6		.1	.0					4.9	6.4
ENE	.6	.6	.3	.0	.0							1.6	5.5
E	1.2	1.6	.8	.3		.0	.0					4.0	6.3
ESE	.3	.8	.9	.6	.1	.1						2.9	8.6
SE	1.2	1.9	1.1	.5	.2	.1	.0					5.0	7.3
SSE	.6	.7	.3	.3	.1	.0						2.0	7.2
S	2.2	2.2	1.1	.6	.0	.0						6.2	5.8
SSW	.9	2.8	2.3	1.0	.1							7.0	7.1
SW	2.5	5.3	5.7	1.9	.2	.1						15.7	7.2
WSW	1.2	1.9	2.7	.7	.2	.0						6.7	7.2
W	1.6	2.5	1.2	.3	.0							5.7	5.5
WNW	.7	1.0	.4	.1	.1							2.4	5.8
NW	.9	1.7	.8	.3	.2							4.0	6.3
NNW	.5	1.2	1.2	.4	.2	.0						3.6	7.6
VARBL													
CALM												17.9	
	18.3	29.8	22.4	8.9	1.7	.7	.2					100.0	5.6

TOTAL NUMBER OF OBSERVATIONS

2416

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.6	11.1	4.2	.2	.1							22.3	5.0
NNE	1.5	2.6	1.0	.3	.1							5.6	5.5
NE	3.3	2.2	.5	.1								6.2	4.1
ENE	1.3	1.0	.3	.0								2.7	3.9
E	2.1	.8	.4	.1								3.3	4.1
ESE	.4	.4	.4	.1	.0	.0						1.4	6.5
SE	.6	.6	.3	.1	.0	.1						1.6	5.6
SSE	.6	.5	.1		.0	.1						1.3	5.7
S	1.3	1.5	.6		.0							3.4	4.9
SSW	.7	1.3	1.7	.3	.0							4.1	6.6
SW	1.3	1.8	2.8	.7	.1	.0						6.8	7.2
WSW	.7	.4	.8	.4								2.3	6.7
W	.8	.9	.4	.0	.0							2.1	5.0
WNW	.3	.3	.3	.0								.9	5.3
NW	1.4	1.6	.6	.0								3.6	4.6
NNW	1.6	3.4	1.3	.0		.0						6.4	5.2
VARBL													
CALM												25.0	
	24.5	30.5	15.7	2.6	.5	.2						100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 2338

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

0300-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	8.2	11.9	3.7	.3								24.1	4.6
NNE	2.4	2.6	.9	.1								6.0	4.5
NE	3.3	2.3	.3	.3								6.2	4.1
ENE	.8	1.0	.2									1.9	3.8
E	2.1	1.5	.1									1.7	3.6
ESE	.1	.4	.1	.0								.7	5.6
SE	.6	.7	.1	.0								1.4	4.7
SSE	.3	.6	.1									1.1	4.5
S	1.3	1.0	.6									2.8	4.5
SSW	.3	.8	.8	.2	.0							2.1	7.2
SW	1.1	1.0	1.1	.3	.1	.0						3.6	6.6
WSW	.4	.3	.5	.2								1.4	6.6
W	.6	.9	.2	.0								1.8	4.7
WNW	.6	.4	.0									1.0	3.6
NW	1.7	1.8	.4	.0								3.9	4.3
NNW	2.1	4.2	1.2	.0		.0						7.5	4.9
VARBL													
CALM												30.8	
	25.9	31.3	10.2	1.5	.1	.1						100.0	3.3

TOTAL NUMBER OF OBSERVATIONS 2335

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 YEARS SEP NORTH  
ALL WEATHER CLASS 0600-0800 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	8.7	12.9	3.4	.2								25.2	4.6
NNE	3.3	4.1	.7	.4	.0							8.6	4.6
NE	4.7	2.4	.8	.1								8.0	3.9
ENE	1.1	.9	.4									2.4	4.4
E	2.1	1.3	.4	.0								3.9	3.9
ESE	.6	.3	.1									1.0	3.9
SE	1.4	.6	.1	.0								2.2	3.7
SSE	.3	.2	.1									.6	4.1
S	.5	.6	.3									1.4	4.6
SSW	.3	.4	.3									1.2	6.1
SW	.3	.5	.5	.3								1.5	7.0
WSW	.2	.3	.1	.1								.6	5.5
W	.4	.3			.0							.7	4.1
WNW	.4	.3	.1									.8	3.9
NW	1.6	1.4	.3									3.2	3.9
NNW	2.0	4.4	1.1	.0								7.5	4.8
VARBL													
CALM												31.3	
	27.8	30.9	8.8	1.2	.1							100.0	3.1

TOTAL NUMBER OF OBSERVATIONS 2337

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-71 SEP  
STATION STATION NAME YEARS NORTH  
ALL WEATHER  
CLASS  
CONDITION  
0900-1100  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥56	%	MEAN WIND SPEED
N	2.1	2.0	.6	.1								4.7	4.3
NNE	1.5	1.2	.9	.6	.0							4.2	6.0
NE	4.2	2.5	.6	.2								7.6	4.1
ENE	2.6	3.3	1.1	.2								7.2	4.8
E	4.7	6.4	2.8	.8	.1							14.7	5.3
ESE	1.8	2.7	2.1	.4								6.9	5.8
SE	3.7	2.4	1.8	.3								8.2	4.9
SSE	.9	1.1	.6	.0								2.6	4.8
S	1.8	1.5	1.2	.2								4.6	5.0
SSW	.4	1.1	.9	.3								2.7	6.6
SW	1.2	1.4	1.4	.5	.1							4.6	6.7
WSW	.5	.2	.3	.1								1.2	5.2
W	.7	.2	.1									1.2	3.6
WNW	.3	.2										.5	3.0
NW	.6	.3										.9	3.2
NNW	.5	.3										.7	2.9
VARBL													
CALM												27.4	
	27.4	26.9	14.3	3.7	.3							100.0	2.7

TOTAL NUMBER OF OBSERVATIONS 2337

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	.9	.4	.2		.0						2.7	3.2
NNE	.3	.5	.2	.1	.0	.0						1.2	6.2
NE	1.2	1.2	.4	.3	.0							3.2	5.3
ENE	1.1	1.0	.6	.2								3.0	5.4
E	2.5	3.4	3.0	.7	.0							9.6	5.9
ESE	1.2	3.2	2.5	.6	.1	.0						7.6	6.6
SE	3.0	4.4	2.6	.9	.0							10.9	5.8
SSE	1.0	2.7	1.5	.4								5.5	5.9
S	3.3	3.9	2.8	.4	.1							10.5	5.6
SSW	1.6	2.1	2.4	1.1	.1							7.4	7.2
SW	2.6	4.5	3.9	1.5	.3							12.9	6.8
WSW	.9	1.4	1.2	.4	.1							4.0	6.6
W	1.5	1.2	.7	.2								3.6	5.0
WNW	.2	.6	.2									.9	4.7
NW	.9	.5	.2	.0								1.7	4.2
NNW	.5	.2	.1	.0								.8	4.0
VARI													
CALM												14.7	
	22.9	31.7	22.7	7.1	.9	.1						100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 2334

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 YEARS SEP  
MONTH  
CLASS ALL WEATHER  
HOURS (L.S.T.) 1500-1700  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	.9	.6	.3	.1							3.1	6.0
NNE	.4	.4	.3	.2	.0							1.4	6.5
NE	1.1	.9	.4	.1								2.5	4.8
ENE	.5	.6	.8	.3								2.2	6.5
E	1.6	2.0	1.5	.4	.0							5.6	5.9
ESE	1.0	1.0	1.0	.6	.1							3.6	6.6
SE	1.7	1.6	1.4	.4	.1	.0	.0					5.3	6.4
SSE	.6	1.8	.9	.1								3.4	5.6
S	3.0	5.0	3.2	.6	.0							11.8	5.6
SSW	1.4	4.0	4.6	2.5	.1							12.6	7.7
SW	3.9	5.9	5.5	3.0	.8	.0						19.2	7.5
WSW	1.0	1.5	2.6	1.6	.2	.0						7.0	8.4
W	1.7	2.5	1.7	.7	.1							6.6	6.2
WNW	.5	.6	.2	.1								1.4	4.9
NW	.4	.8	.2	.1		.0						1.5	5.5
NNW	.3	.5	.2		.0							1.0	5.1
VARBL													
CALM												11.7	
	20.3	30.2	25.1	10.8	1.7	.2	.0					100.0	5.9

TOTAL NUMBER OF OBSERVATIONS 2334

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

SEP  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.7	.7	.4	.0	.0						4.2	6.0
NNE	.5	.5	.3	.3								1.3	6.3
NE	1.0	1.2	.5	.2	.1	.0						3.0	5.7
ENE	.5	.6	.3	.2								1.6	5.7
E	1.7	1.6	.5	.3								4.1	5.0
ESE	.4	.6	.6	.3	.0							2.0	7.6
SE	1.0	1.5	.6	.1	.2	.0						3.3	5.9
SSE	.8	1.0	.5		.0							2.3	5.2
S	2.6	3.4	1.2	.2		.0						7.5	5.0
SSW	1.9	3.6	2.4	.9	.0							8.9	6.1
SW	3.9	6.0	4.9	1.5	.2							16.0	6.3
WSW	1.6	1.9	1.8	.6								6.0	6.1
W	2.1	3.3	1.6	.2	.1							7.3	5.2
WNW	.5	1.5	.6	.1								2.6	5.4
NW	2.0	1.6	.3	.2	.0		.0					4.2	5.0
NNW	.7	1.2	.2		.0							2.1	4.6
VARBL													
CALM												23.5	
	21.0	31.1	17.1	5.5	.8	.2	.0					100.0	4.4

TOTAL NUMBER OF OBSERVATIONS

2335



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 SEP  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CLASS  
CONDITION  
2100-2300  
HOURS (L & T)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	4.8	6.8	2.7	.5	.0							14.8	5.1
NNE	1.9	2.0	.5	.2	.0		.0					4.5	4.9
NE	2.3	1.6	.6	.1		.0						4.6	4.5
ENE	.6	.8	.3	.1								1.8	4.7
E	1.4	2.1	.3	.2								3.0	4.4
ESE	.5	.5	.5	.2		.0						1.7	6.7
SE	.6	.7	.5	.3	.1							2.1	6.6
SSE	.4	.6	.6	.1	.0	.0						1.8	6.5
S	1.2	1.2	.5	.1								3.0	4.8
SSW	.8	1.8	1.5	.3	.0	.0						4.6	6.7
SW	2.1	3.3	3.6	1.0	.1							10.1	6.5
WSW	.8	1.2	1.5	.3	.0							3.9	6.6
W	.9	2.3	.8	.1								4.1	5.2
WNW	1.0	.9	.3	.0	.0							2.3	4.7
NW	1.8	2.4	1.2	.3	.1							5.8	5.6
NNW	1.6	3.3	1.6	.1		.1						6.7	5.4
VARBL													
CALM												25.3	
	22.5	30.4	17.0	4.0	.6	.3	.0					100.0	4.1

TOTAL NUMBER OF OBSERVATIONS 2328

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-71 OCT  
STATION STATION NAME YEARS MONTH  
ALL WEATHER 0000-0200  
CLASS HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	9.1	16.6	6.5	.5								12.7	5.0
NNE	3.0	2.8	1.7	.5	.1							8.2	5.2
NE	3.2	2.8	1.1	.2								7.2	4.5
ENE	.7	.6	.1									1.4	3.9
E	1.2	1.1	.1	.0								1.4	4.1
ESE	.3	.3	.0									.7	4.1
SE	.5	.5										1.0	3.6
SSE	.1	.2	.1									.4	4.8
S	.9	1.1	.5									2.5	4.5
SSW	.3	.7	.4	.0								1.4	5.5
SW	.7	1.6	1.0	.4								3.1	6.8
WSW	.2	.3	.4	.2								1.2	7.3
W	.6	.2	.2									1.0	4.2
WNW	.3	.2	.2		.0							.7	5.4
NW	1.2	1.6	.2	.1								3.1	4.6
NNW	2.4	3.9	1.4	.2								8.2	5.0
VARBL													
CALM												24.9	
	24.8	33.9	14.0	2.2	.1							100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 2415

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

OCT  
MONTH

ALL WEATHER  
CLASS

0300-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	11.3	16.6	4.2	.6								32.7	4.7
NNE	3.4	4.2	1.0	.4								9.0	4.5
NE	3.4	2.8	1.4	.1								7.7	4.6
ENE	.9	.3	.5									1.6	4.4
E	.9	.7	.2	.0								1.8	4.2
ESE	.3	.0										.4	2.9
SE	.2	.1	.0									.4	4.0
SSE	.2	.1	.1									.3	4.0
S	.8	.3	.3									1.6	4.3
SSW	.5	.4	.2	.0	.0							1.2	5.2
SW	.4	.8	.8	.2								2.2	6.5
WSW	.2	.2	.2									.7	5.3
W	.7	.4	.2									1.2	4.0
WNW	.2	.3	.0									.3	3.9
NW	1.6	1.6	.2	.0								3.4	4.0
NNW	2.3	4.1	1.1	.0								7.6	4.6
VARBL													
CALM												27.7	
	27.2	33.2	10.4	1.5	.0							100.0	3.3

TOTAL NUMBER OF OBSERVATIONS 2413

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

OCT  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	10.5	13.9	4.0	.6	.2							29.2	4.7
NNE	4.1	3.4	1.1	.2	.0	.1						9.1	4.7
NE	3.9	2.7	1.1	.2								7.9	4.5
ENE	1.2	.6	.4									2.2	4.0
E	1.5	.8	.4	.0								2.7	4.0
ESE	.5	.2	.1	.0								.8	4.4
SE	.3	.4	.1									.8	4.2
SSE	.1	.1	.0									.2	5.0
S	.3	.7	.2									1.2	4.7
SSW	.2	.2	.4	.2								1.0	7.3
SW	.2	.3	.6	.2								1.3	7.0
WSW	.1	.2	.1									.5	5.1
W	.4	.2										.6	3.1
WNW	.3	.2	.0									.5	3.9
NW	1.6	1.2	.1									2.9	3.7
NNW	3.1	4.8	.8	.1								8.7	4.3
VARBL													
CAIM												30.4	
	28.3	30.0	9.3	1.6	.2	.1						100.0	3.2

TOTAL NUMBER OF OBSERVATIONS 2414

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 42-46, 51-71 YEARS OCT MONTH  
ALL WEATHER CLASS 0900-1100 HOURS (L S T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.2	2.4	.6	.3	.2	.1	.0					5.9	5.7
NNE	2.0	1.5	1.0	.2	.3							5.1	5.9
NE	4.1	2.6	1.3	.5	.0							8.5	4.8
ENE	2.7	2.2	1.0	.4	.0							6.3	4.8
E	6.4	5.8	2.7	.8	.0							15.8	4.9
ESE	2.1	1.7	1.1	.1								5.0	4.7
SE	2.7	2.2	.9	.0								5.9	4.3
SSE	1.0	.9	.2	.0								2.1	4.0
S	1.5	1.0	.6	.2								3.3	4.9
SSW	.3	.8	.6	.2	.1							2.0	7.1
SW	.8	.9	1.0	.4	.2							3.2	7.1
WSW	.4	.3	.4	.1	.0							1.3	6.6
W	.4	.2	.1	.1								.8	5.3
WNW	.4	.2	.1	.0								.7	4.6
NW	.4	.2	.0	.1		.0						.7	5.8
NNW	.7	.4	.1									1.2	3.8
VARBL													
CALM												32.1	
	28.1	23.3	11.8	3.6	.9	.2	.0					100.0	3.5

TOTAL NUMBER OF OBSERVATIONS 2412

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46,51-71 YEARS OCT MONTH  
ALL WEATHER CLASS 1200-1400 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.5	.5	.2	.1							2.0	6.6
NNE	.7	.5	.4	.2	.1							1.9	6.3
NE	1.2	1.5	.7	.2								3.6	5.3
ENE	1.1	1.8	1.0	.2								4.1	5.6
E	3.3	5.1	3.1	.7	.0							12.3	5.7
ESE	2.1	2.7	2.2	.7								7.7	5.9
SE	3.1	4.0	2.7	.4								10.2	5.4
SSE	1.7	2.0	1.2	.1								5.0	5.0
S	2.9	3.6	1.5	.2	.1							6.3	5.0
SSW	1.2	2.3	1.5	.9								6.0	6.6
SW	2.0	3.1	2.4	.8	.2	.0						8.5	6.3
WSW	.5	.9	1.0	.7	.1	.0						3.2	7.6
W	1.2	1.0	.8	.2	.0							3.2	5.4
WNW	.4	.3	.1	.1	.1							1.0	6.6
NW	.6	.3	.2	.1	.1							1.4	6.4
NNW	.3	.2										.6	3.2
VARBL													
CALM												21.0	
	23.0	29.9	19.2	5.9	.9	.1						100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 2412

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 OCT  
STATION STATION NAME YEARS NORTH  
ALL WEATHER  
CLASS  
1500-1700  
HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.9	.5	.2	.0							2.3	6.1
NNE	.5	.3	.2	.1	.0							1.2	6.0
NE	.8	.8	.3	.1								2.1	4.9
ENE	.7	.5	.2	.0								1.4	4.3
E	1.7	2.7	1.9	.4								6.8	5.9
ESE	1.0	1.5	1.0	.1	.0							3.7	5.7
SE	2.0	2.7	1.5	.0								6.3	5.0
SSE	.7	1.5	.5	.1								2.9	5.1
S	4.0	4.6	2.5	.4								11.4	5.0
SSW	2.3	4.3	4.5	1.2	.0							12.5	6.7
SW	3.2	4.8	4.5	2.0	.2	.1						14.8	6.9
WSW	1.1	1.7	1.7	.9	.1	.0						5.4	7.2
W	1.3	1.9	1.0	.5	.1	.0						4.9	6.3
WNW	.5	.6	.4	.1	.1	.0						1.7	6.8
NW	.9	.6	.3	.0	.0							1.9	4.7
NNW	.3	.4	.2	.0								1.0	4.7
VARBL													
CALM												19.3	
	21.8	30.0	21.5	6.4	.7	.2						100.0	4.8

TOTAL NUMBER OF OBSERVATIONS 2414

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

22111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

DCT  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.9	2.4	1.0	.1	.0							6.3	4.6
NNE	.8	.5	.2	.1	.0							1.6	4.8
NE	1.0	.7	.6	.2								2.5	5.5
ENE	.6	.5	.2	.0								1.4	4.6
E	1.5	.9	.5	.1								2.9	4.4
ESE	.6	.2	.2	.0								1.1	4.5
SE	1.0	1.0	.4									2.4	4.4
SSE	.6	.3	.2									1.1	4.1
S	2.7	3.1	.8	.1								6.8	4.3
SSW	1.5	2.7	1.5	.2								5.9	5.3
SW	2.9	4.1	2.6	.7	.1							16.4	5.7
WSW	1.6	2.4	1.2	.2	.1							5.6	5.4
W	2.4	3.0	.9	.1	.0							6.3	4.6
WNW	1.1	2.0	.1	.4								3.6	5.1
NW	2.3	2.9	.6	.2	.1	.0						6.3	4.8
NNW	2.0	2.6	.3	.1								5.0	4.2
VARBL													
CALM												30.4	
	25.6	29.5	11.5	2.1	.4	.0						100.0	3.4

TOTAL NUMBER OF OBSERVATIONS 2413



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

22111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

001  
MONTH

ALL WEATHER  
CLASS

2100-2300  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	6.3	13.4	7.0	.5	.0							27.2	5.4
NNE	2.1	3.2	1.5	.1	.1	.0						7.0	5.3
NE	2.2	2.2	.9	.1								5.3	4.6
ENE	.4	.7	.3	.0								1.4	4.8
E	.7	.9	.5	.0								2.1	5.3
ESE	.4	.5	.0	.1								1.0	5.3
SE	.3	.4	.1	.0								.9	4.8
SSE	.2	.1	.2	.1								.7	6.3
S	1.1	.7	.1	.1								2.0	4.1
SSW	.6	1.1	.7	.2								2.4	6.0
SW	.8	1.5	1.1	.4	.1							3.9	6.5
WSW	.2	.8	.4	.1								1.5	5.9
W	.6	1.0	.4	.2								2.3	5.7
WNW	.4	.9	.2	.1								1.6	5.5
NW	1.5	2.7	1.0	.2	.0							5.5	5.3
NNW	1.8	5.3	2.4	.2	.0							9.8	5.5
VARBL													
CALM												25.4	
	19.7	35.2	14.8	2.6	.4	.0						100.0	4.0

TOTAL NUMBER OF OBSERVATIONS

2417

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

28111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

0000-0200  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	10.3	19.3	4.8	.6	.1							35.2	4.9
NNE	2.7	4.5	1.5	.4	.1							9.2	5.1
NE	2.3	3.4	1.0	.1								5.8	4.6
ENE	.6	.5	.1	.0								1.3	4.3
E	.8	.8	.1	.1	.0							1.8	4.9
ESE	.3	.2		.0								.5	4.3
SE	.4	.1	.1									.6	4.1
SSE	.2	.2										.5	3.2
S	.5	.7	.2									1.4	4.2
SSW	.2	.3	.2	.1								.7	6.6
SW	.7	.4	.7	.2								2.0	6.2
WSW	.1	.1	.0	.1								.3	7.5
W	.4	.2	.0									.7	3.5
WNW	.4	.3	.1	.1								1.0	4.5
NW	1.5	1.4	.7	.1								3.7	4.8
NNW	2.7	4.7	2.2	.1								9.6	5.0
VARBL													
CALM												24.7	
	24.2	37.1	11.8	2.0	.3							100.0	3.7

TOTAL NUMBER OF OBSERVATIONS 2293

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NDV  
MONTH

ALL WEATHER  
CLASS

0000-0500  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	12.0	17.7	4.1	.4	.1	.0						34.3	4.6
NNE	3.6	4.1	2.1	.4	.0							10.2	5.1
NE	2.6	2.6	.8	.4								6.4	4.9
ENE	.7	.8	.3									1.7	4.1
E	.9	.6	.2	.0								1.7	4.3
ESE	.1			.0								.2	5.3
SE	.2	.3										.5	4.0
SSE	.1	.1	.1									.3	5.5
S	.4	.4	.3	.0								1.1	5.2
SSW	.4	.4	.3	.1								1.3	6.2
SW	.6	.4	.1	.1								1.2	4.6
WSW	.1	.3	.0									.4	4.7
W	.4	.5	.1	.0								1.1	4.9
WNW	.2	.2		.0								.5	4.1
NW	1.3	1.6	.4	.1								3.4	4.5
NNW	2.2	5.4	1.7									9.5	4.8
VARBL													
CALM												26.1	
	25.9	35.5	10.6	1.7	.1	.0						100.0	3.5

TOTAL NUMBER OF OBSERVATIONS 2292

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NDV  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	11.2	14.1	2.5	.5	.2							28.5	4.4
NNE	3.3	3.4	1.2	.7	.1							8.9	3.2
NE	2.8	1.7	.9	.4	.0							5.9	4.9
ENE	1.1	.9	.1									2.1	3.6
E	1.0	.3	.1									1.4	3.3
ESE	.3	.3										.5	3.5
SE	.4	.3	.2									.9	4.2
SSE	.3	.4	.1									.7	4.0
S	.7	.4	.2	.1								1.3	4.7
SSW	.1	.7	.4	.1								1.4	2.9
SW	.4	.4	.1	.2								1.2	6.1
WSW	.1	.0	.0									.2	4.0
W	.5	.3	.1									.9	3.9
WNW	.2	.2	.1									.3	4.5
NW	1.7	1.0	.3	.0								3.1	3.9
NNW	4.3	5.3	1.3	.2	.0							11.1	4.5
VARBL													
CALM												31.6	
	20.3	29.7	7.6	2.2	.4							100.0	3.1

TOTAL NUMBER OF OBSERVATIONS

2291

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 42-46,51-71 YEARS NDV NORTH  
ALL WEATHER CLASS 0900-1100 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	4.1	4.0	1.0	.6	.2	.1						9.9	5.0
NNE	2.2	1.0	1.4	1.0	.4							6.6	6.7
NE	3.4	2.2	1.0	1.0	.0	.0						7.7	5.3
ENE	1.9	1.7	.7	.3								4.7	5.0
E	4.9	3.5	.4	.3	.0	.0						9.2	4.1
ESE	1.5	1.8	.3	.0								3.7	4.1
SE	3.0	1.2	.4	.0								4.6	3.7
SSE	1.1	.3	.1	.0								1.5	3.6
S	1.4	1.0	.5	.0								2.9	4.4
SSW	.3	.6	.7	.3								2.0	6.7
SW	.9	.6	.9	.4	.0							2.8	6.6
WSW	.4	.1	.2	.1								.8	5.6
W	.3	.2	.2	.1	.0							.8	6.8
WNW	.3	.0	.1	.0	.0							.5	5.5
NW	1.3	.3	.2	.2	.1	.0						2.1	5.4
NNW	1.0	.9	.3	.1	.1							2.4	5.3
VARBL													
CALM												37.7	
	28.0	20.1	8.4	4.6	1.0	.2						100.0	3.2

TOTAL NUMBER OF OBSERVATIONS 2292

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	.4	.6	.3	.1							2.7	6.1
NNE	.7	.5	.6	.3	.0							2.3	6.8
NE	1.4	1.1	.7	.4	.0							3.6	5.8
ENE	1.2	1.9	1.1	.7	.0							4.9	6.4
E	3.9	3.9	2.9	.3								11.2	5.3
ESE	2.2	2.6	1.1	.1								6.1	4.7
SE	2.8	3.0	1.4	.1								7.3	4.8
SSE	2.2	1.7	.3									4.2	3.7
S	4.2	3.1	.7	.3	.0							8.3	4.2
SSW	1.5	1.1	1.2	.7								4.3	6.3
SW	2.4	1.3	1.8	.7								6.2	6.0
WSW	1.0	.5	.7	.3	.0							2.3	6.1
W	1.1	.6	.3	.4	.1							2.6	6.2
WNW	.1		.3	.2	.2	.0						.8	12.2
NW	.4	.3	.1	.2	.1	.0						1.3	7.9
NNW	.3	.1	.2	.3	.0							1.0	7.5
VARBL													
CALM												30.6	
	26.7	22.1	14.1	5.6	.8	.1						100.0	3.8

TOTAL NUMBER OF OBSERVATIONS 2288

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

1500-1700  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.7	.6	.3	.0		.0					2.1	7.3
NNE	.4	.3	.4	.2	.0							1.4	7.6
NE	.7	.8	.4	.2								2.1	5.5
ENE	1.2	.9	.6	.1								2.8	5.1
E	1.7	3.1	1.4	.3	.1							6.6	5.7
ESE	1.3	.8	.6	.1								2.8	5.0
SE	2.4	1.9	.6									4.9	4.0
SSE	1.8	1.5	.1									3.4	3.7
S	6.5	5.3	1.8	.1								13.7	4.2
SSW	2.7	4.2	2.5	.8	.0							10.2	5.8
SW	3.3	3.0	2.6	1.4	.0							10.3	6.2
WSW	1.0	1.5	1.2	.4	.0							4.2	6.2
W	1.3	1.0	1.0	.4	.3	.0						4.0	6.9
WNW	.6	.2	.3	.5	.1							1.7	8.2
NW	.7	.7	.3	.2								1.8	5.5
NNW	.6	.2	.2	.2	.1							1.2	6.4
VARBL													
CALM												26.9	
	26.6	26.0	14.4	5.3	.8	.0	.0					100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 2285

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

NOV  
MONTH

ALL WEATHER  
CLASS

1800-2000  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.2	4.8	1.7	.4	.1							12.2	4.8
NNE	1.4	.8	.4	.4	.1							3.1	5.8
NE	1.0	1.0	.3	.1								2.4	5.0
ENE	.3	.7	.1									1.1	4.4
E	1.1	.7	.3	.1	.1							2.3	5.0
ESE	.5	.2	.1	.0								.9	4.3
SE	.7	.3	.0									1.0	3.5
SSE	.4	.5	.1									1.0	4.1
S	3.1	2.7	.6	.0								6.5	4.0
SSW	1.7	2.3	.7	.1								4.8	4.6
SW	2.1	2.1	1.1	.3								5.7	5.0
WSW	.6	1.1	.7	.1	.0							2.7	6.0
W	2.0	1.7	.5	.3	.0	.0						4.6	4.9
WNW	1.5	1.5	.2	.2								3.4	4.2
NW	3.8	3.5	.7	.2								8.3	4.3
NNW	2.9	3.7	.9	.1								7.6	4.3
VARBL													
CALM												32.6	
	28.3	27.7	8.5	2.4	.4	.0						100.0	3.1

TOTAL NUMBER OF OBSERVATIONS 2290



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/AC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 LUKE AFB ARIZONA/PHOENIX 42-46, 51-71 NOV  
STATION STATION NAME YEARS MONTH  
ALL WEATHER  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	9.5	20.7	6.9	.5	.0							37.7	5.1
NNE	1.7	2.7	1.7	.5	.1							6.8	6.0
NE	2.0	1.7	.7	.0								4.4	4.3
ENE	.5	.4	.3									1.2	4.9
E	.7	.6	.1	.1								1.5	4.9
ESE	.1	.2	.1									.4	4.6
SE	.3	.1										.4	3.1
SSE	.4	.3	.1	.0								.3	4.3
S	.9	.7	.3									1.9	4.2
SSW	.4	.7	.4	.1	.0							1.7	6.1
SW	.6	.7	1.0	.1								2.4	6.1
WSW	.6	.1	.3	.2	.1							1.2	6.7
W	.3	.3	.2	.0	.0							.9	5.9
WNW	.2	.6	.1	.2								1.1	5.9
NW	1.5	2.1	1.0	.3	.0							5.1	5.5
NNW	2.5	7.5	2.5	.1								12.7	5.1
VARBL													
CALM												19.8	
	22.3	39.5	13.8	2.2	.4							100.0	4.2

TOTAL NUMBER OF OBSERVATIONS 2291

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 41-45, 51-71 YEARS DEC MONTH  
ALL WEATHER CLASS 0000-0200 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	11.5	20.4	4.8	.3	.1							36.8	4.6
NNE	3.3	3.4	1.0	.3	.1	.0						8.1	4.8
NE	2.7	2.2	.6	.0								5.5	4.1
ENE	.6	.7	.1									1.5	4.0
E	1.1	.7	.2	.0								2.1	4.2
ESE	.1	.2	.1									.4	4.7
SE	.2	.3	.1									.6	4.7
SSE	.1	.2	.0									.3	4.4
S	.5	.5	.5	.0								1.5	5.7
SSW	.2	.4	.5	.2								1.4	7.2
SW	.5	.6	.5	.2	.1							1.9	6.7
WSW	.1	.2	.2									.6	5.7
W	.5	.4		.0	.0							1.0	4.4
WNW	.7	.2	.0	.1								1.0	4.3
NW	2.1	1.5	.5	.1								4.2	4.4
NNW	2.1	4.9	1.7	.3	.0							9.1	5.3
VARBL													
CALM												24.0	
	26.5	36.8	10.6	1.7	.3	.0						100.0	3.6

TOTAL NUMBER OF OBSERVATIONS 2409

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX STATION NAME 41-45, 51-71 YEARS DEC MONTH  
ALL WEATHER CLASS 0300-0500 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	11.4	18.1	3.4	.1								33.0	4.4
NNE	3.2	2.9	.9	.2	.1							7.3	4.4
NE	2.8	2.3	.5	.2								5.8	4.3
ENE	.7	.8	.0									1.5	3.6
E	.9	.7	.1	.1								1.9	4.5
ESE	.1	.2										.3	4.0
SE	.1	.2	.0									.4	4.2
SSE	.2	.2	.0									.5	4.4
S	.5	.5	.2	.0								1.2	4.7
SSW	.2	.5	.5	.0	.0							1.4	6.5
SW	.3	.6	.4	.2								1.5	6.2
WSW	.2	.2	.2	.0		.0						.7	6.1
W	.4	.3	.1	.2								1.0	5.3
WNW	.4	.2	.0	.0	.0							.7	5.0
NW	2.5	1.5	.6	.2								4.9	4.5
NNW	2.9	5.4	1.4	.1								9.7	4.7
VARBL													
CALM												28.0	
	27.1	34.8	8.4	1.5	.2	.0						100.0	3.2

TOTAL NUMBER OF OBSERVATIONS 2411

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-45, 51-71  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

0600-0800  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	10.9	14.0	2.3	.1								27.3	4.2
NNE	4.3	2.9	.6	.5	.1							8.4	4.4
NE	3.7	2.2	.4	.1								6.4	3.9
ENE	.7	.4	.2									1.4	3.8
E	1.0	.8	.3									2.2	4.3
ESE	.3	.2	.0									.5	3.6
SE	.5	.2										.7	3.3
SSE	.4	.2	.0									.7	3.6
S	.2	.6	.2									1.0	5.2
SSW	.2	.7	.4	.2								1.4	6.3
SW	.4	.7	.2	.1								1.4	5.2
WSW	.2	.2	.1		.0							.5	5.6
W	.5	.5	.1	.1								1.2	4.4
WNW	.3	.2	.0	.1								.7	5.1
NW	2.2	1.8	.7	.1								4.8	4.5
NNW	3.0	5.1	1.5	.1								9.7	4.7
VARBL													
CALM												31.6	
	29.0	30.8	7.0	1.5	.1							100.0	3.0

TOTAL NUMBER OF OBSERVATIONS 2413

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-45, 51-71  
YEARS

DEC  
MONTH

AL, WEATHER  
CLASS

0900-1100  
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.4	5.5	1.4	.6								12.9	4.5
NNE	2.8	1.7	1.2	1.0	.2							7.0	6.1
NE	3.8	2.3	1.1	.5								7.7	4.6
ENE	2.0	1.3	.6	.2								4.1	4.6
E	3.4	1.6	.3	.2								5.4	3.7
ESE	1.5	1.2	.2									2.9	3.5
SE	1.7	1.1	.0									2.8	3.4
SSE	1.0	.3	.0									1.4	3.2
S	1.0	1.0	.4	.2								2.5	4.7
SSW	.5	.4	.5	.3								1.7	6.7
SW	.7	.7	.2	.2	.2	.0						2.1	6.8
WSW	.4	.5	.1	.0	.1							1.1	5.6
W	.5	.2	.1	.1	.0							1.0	5.8
WNW	.3	.2	.2	.1								.7	5.2
NW	1.2	.7	.3	.3	.1	.0						2.7	5.8
NNW	1.5	1.5	.2	.2								3.5	4.3
VARBL													
CALM												40.4	
	27.8	20.1	6.9	3.9	.7	.1						100.0	2.8

TOTAL NUMBER OF OBSERVATIONS 2408

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/NAAC

# SURFACE WINDS

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-45, 51-71  
YEARS

DEC  
MONTH

ALL WEATHER  
CLASS

1200-1400  
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	1.1	.5	.2	.0							3.3	4.9
NNE	.7	1.0	.8	.7	.0							3.2	7.1
NE	2.0	1.8	1.2	.2	.1	.0						5.4	5.6
ENE	1.3	1.3	.7	.2								3.6	5.2
E	3.6	3.1	1.5	.3								8.5	4.8
ESE	2.2	1.9	.5									4.6	4.1
SE	3.0	2.8	.5	.0								6.3	4.0
SSE	1.9	1.5	.2									3.6	3.6
S	2.9	2.8	.8	.0	.0							6.6	4.3
SSW	1.9	1.4	1.0	.5	.0							4.9	5.7
SW	2.2	1.4	1.4	.7	.1	.2						6.1	6.7
WSW	1.0	.7	.6	.4	.0							2.7	6.0
W	1.0	.7	.4	.3	.1							2.5	6.3
WNW	.3	.2	.4	.1	.1							1.1	7.6
NW	.8	.4	.2	.2	.1	.0						1.7	6.4
NNW	.5	.2	.3	.1								1.2	6.0
VARBL													
CALM												34.6	
	26.8	22.3	11.2	4.2	.7	.2						100.0	3.4

TOTAL NUMBER OF OBSERVATIONS

2411

1  
DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/4AC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 LUKE AFB ARIZONA/PHOENIX 41-45, 51-71 DEC  
STATION STATION NAME YEARS  
ALL WEATHER  
CLASS  
CONDITION  
1900-1700  
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.3	1.0	.1								3.9	5.2
NNE	.6	.7	.5	.2	.1							2.1	6.4
NE	.9	1.0	.9	.2								3.0	5.9
ENE	.9	1.0	.3	.1	.0							2.3	4.9
E	2.1	2.4	.9	.1								5.6	4.7
ESE	1.4	.7	.3	.1								2.4	4.1
SE	1.9	1.5	.2	.1								3.6	3.7
SSE	2.2	1.2	.1									3.5	3.5
S	4.4	5.1	1.3	.0								10.9	4.3
SSW	3.7	2.9	1.6	.5								8.6	4.9
SW	3.0	2.2	1.9	.7	.3							8.0	5.9
WSW	.6	.9	.5	.6	.0	.0						2.7	7.4
W	1.4	.8	.6	.5	.0	.0						3.3	6.0
WNW	.6	.7	.2	.7	.0	.0						2.3	7.6
NW	1.1	1.0	.5	.1	.0	.0						2.7	5.3
NNW	.7	.4	.4	.1								1.5	5.2
VARBL													
CALM												33.5	
	26.7	23.6	11.3	4.2	.6	.1						100.0	3.4

TOTAL NUMBER OF OBSERVATIONS 2414

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

# SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

23111 STATION LUKE AFB ARIZONA/PHOENIX 41-45, 51-71 YEARS DEC NORTH  
ALL WEATHER CLASS 1800-2000 HOURS (LST)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	5.4	5.4	1.2	.3	.0							12.3	4.3
NNE	1.4	1.3	.9	.3								4.0	5.3
NE	.8	1.2	.8	.1								2.9	5.3
ENE	.7	.3	.2	.1								1.2	4.6
E	1.0	.3	.4	.1								1.7	5.0
ESE	.5	.3	.0	.1								.9	4.7
SE	.3	.3	.0	.0								.9	4.2
SSE	.6	.3	.2	.0		.0						1.1	5.1
S	2.3	2.2	.6	.0								5.1	4.3
SSW	1.9	1.7	.2	.2	.1							4.1	4.6
SW	2.3	1.7	1.2	.4	.0							5.7	5.4
WSW	.7	.5	.3	.1	.0							1.6	5.1
W	1.5	1.5	.4	.2	.0							3.7	4.6
WNW	1.1	1.4	.4	.1	.1							3.1	5.1
NW	4.1	2.4	.7	.2	.1							8.5	4.3
NNW	3.8	5.0	1.0	.1								9.9	4.3
VARB													
CALM												33.3	
	28.5	26.7	8.6	2.3	.5	.0						100.0	3.1

TOTAL NUMBER OF OBSERVATIONS 2410



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/VAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

23111 STATION LUKE AFB ARIZONA/PHOENIX 41-43, 51-71 YEARS CEC  
STATION NAME NORTH  
ALL WEATHER CLASS 2100-2300 HOURS (L.S.T.)  
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	9.6	18.7	6.4	.2								34.9	4.9
NNE	2.3	2.9	1.7	.4	.2							7.5	5.7
NE	1.2	2.2	.7	.1								4.3	4.8
ENE	.5	.5	.2									1.2	4.7
E	.5	.6	.2	.1								1.4	4.9
ESE	.4	.2	.1									.6	3.8
SE	.2	.3	.2	.0								.9	3.6
SSE	.2	.3	.1									.6	4.7
S	.6	.3	.3	.1								1.9	3.1
SSW	.5	.4	.5	.5								1.7	7.3
SW	.7	.7	.2	.2	.1							1.9	3.9
WSW	.3	.4	.2	.2	.0							1.0	6.4
W	.3	.5	.1		.0							1.0	4.3
WNW	.3	.5	.2	.2	.0							1.2	6.6
NW	1.7	2.5	.9	.2	.1	.0						5.3	3.5
NNW	2.9	7.5	3.3	.3								14.0	3.4
VARBL													
CALM												20.4	
	22.2	39.1	15.3	2.5	.5	.0						100.0	4.2

TOTAL NUMBER OF OBSERVATIONS 2411

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAAC

PERCENTAGE FREQUENCY OF WIND  
DIRECTION AND SPEED  
(FROM HOURLY OBSERVATIONS)

**SURFACE WINDS**

STATION 22111 STATION NAME LUKE AFB ARIZONA/PHOENIX YEARS 41-46, 51-72 MONTH ALL  
INSTRUMENT CIG 200 TO 1400 FT W/ VSBY 1/2 MI OR MORE,  
CLASS AND/OR VSBY 1/2 TO 2-1/2 MI W/CIG 200 FT OR MORE  
CONDITION ALL  
HOUSE (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	3.3	5.4	1.8	.4	.4	.1	.3	.1				11.9	6.7
NNE	.8	1.5	.5	.3	.5	.7	.4					4.6	12.0
NE	.8	2.0	.8	.3	.3	.5	.1	.1				4.9	10.0
ENE	.8	1.2	.4	.4	.3	.3						3.3	8.1
E	1.6	3.3	1.8	1.3	.5	.1	.1					8.8	7.9
ESE	.7	1.1	.3	.4	.4	.3	.1					3.2	10.3
SE	1.5	2.2	1.3	1.1	.9	.7	.1					7.8	10.1
SSE	1.5	.8	.3	.1	.3	.8						4.0	9.7
S	1.5	2.1	1.5	1.1	.5	.3	.1					7.3	8.7
SSW	.8	1.8	.5	1.1	1.3	.3						5.8	10.2
SW	1.3	1.5	1.6	.9	1.3	.7	.1					7.4	10.9
WSW		.3	.4	.7	.9	.3	.5	.1				3.2	17.8
W	.1	.7	.1	.7	.1	.1						1.8	10.0
WNW	.4	.4	.3	.5	.5	.5	.4					3.0	15.2
NW	1.1	1.3	.4	1.1	.3	.5						4.6	9.5
NNW	1.1	.9	.8	1.1	.3	.3						4.4	9.3
VARBL													
CALM												14.4	
	17.0	26.4	13.1	11.2	8.8	6.3	2.4	.4				100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 758

DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAC)  
ASHEVILLE, NORTH CAROLINA

## PART D

## CEILING VERSUS VISIBILITY

This summary is a bivariate percentage frequency distribution by classes of ceiling from zero to equal to or greater than 20,000 feet and as a separate class "no ceiling", versus visibility in 16 classes from zero to equal to or greater than 10 miles. Data are derived from hourly observations, and three sets of tables are presented as follows:

1. Annual - all years and all hours combined
2. By month - all years and all hours combined
3. By month - by standard 3-hour groups

Due to the cumulative nature of this presentation, it is possible to determine the percentage frequency of occurrence for any given limit of ceiling or visibility separately, or in combination of ceiling and visibility. The totals progress to the right and downward. Ceiling may be determined independently by referring to totals in the extreme right hand column. Also, visibility may be determined independently by reference to the horizontal row of totals at the bottom of the page. The percentage frequency for which the station was meeting or exceeding any given set of minima may be determined from the figure at the intersection of the appropriate ceiling column and visibility row. Several examples in the use of these tables are shown on pages 2 and 3 below.

U. S. Weather Bureau and Navy stations did not report ceilings within the range 10,000 feet and higher prior to January 1949. Summaries prepared from data for these stations using the earlier period and data subsequent to January 1949 will be modified to limit ceilings to 10,000 feet. Short periods of record prior to 1949 for these stations will be eliminated from the summary. For Air Force stations, the "no ceiling" category includes clear and scattered conditions, and ceilings above 20,000 feet for period through June 1948. Beginning in July 1948 for Air Force stations and January 1949 for USWB and U. S. Navy stations the "no ceiling" category consists of observations with less than 6/10 total sky cover and those cases where total sky cover is 6/10 or more, but not more than 1/2 of the sky cover is opaque.

EXAMPLES FOR USE OF CEILING VERSUS VISIBILITY TABLES IN THIS TABULATION

CEILING (FEET)	VISIBILITY (STATUTE MILES)														
	$\geq 10$	$\geq 6$	$\geq 5$	$\geq 4$	$\geq 3$	$\geq 2\frac{1}{2}$	$\geq 2$	$\geq 1\frac{1}{2}$	$\geq 1\frac{1}{4}$	$\geq 1$	$\geq \frac{3}{4}$	$\geq \frac{1}{2}$	$\geq \frac{1}{4}$	$\geq \frac{5}{16}$	$\geq 0$
NO CEILING															
1800															
1500					91.0										92.6
1200															
1000															
900															
800															
700															
600															
500										97.4					98.1
400															
300															
200															
100					95.4		96.9			98.3					100.0
0															

EXAMPLE # 1 Read ceiling values independently of visibility under column at right headed  $\geq 0$ .  
For instance, from the table: Ceiling  $\geq 1500$  feet = 92.6%.  
Ceiling  $\geq 500$  feet = 98.1%.

EXAMPLE # 2 Read visibilities independently of ceilings on bottom line opposite  $\geq 0$ . From the table:  
Visibility  $\geq 3$  miles = 95.4%.  
Visibility  $\geq 2$  miles = 96.9%.  
Visibility  $\geq 1$  mile = 98.3%.

EXAMPLE # 3 To obtain combinations of ceiling with visibility, read figure at intersection of the two categories; i.e.: Ceiling  $\geq 1500$  feet with visibility  $\geq 3$  miles = 91.0%.

#### ADDITIONAL EXAMPLES

EXAMPLE # 4 Values below minimums stated in the table may be obtained by subtracting the value given in the table from 100%.  
Thus, to obtain the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles, subtract the value read from the table at the intersection, which is 91.0, from 100.0. The answer 9.0 is the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles.

Likewise, the percentage of observations with ceiling < 500 feet and/or visibility < 1 mile is 2.6, obtained by subtracting 97.4 from 100.0.

EXAMPLE # 5 To find the percentage of observations falling within the two categories given in example above, subtract the value read from the table for the first set of limits from the value in the table for the second set of limits. The difference will be the percentage of observations meeting the lower set of limits, but not meeting the higher set of limits.

The value 91.0 read from the table at the intersection of  $\geq 1500$  feet with  $\geq 3$  miles, subtracted from 97.4 read from the table at the intersection of  $\geq 500$  feet with  $\geq 1$  mile is equal to 6.4%. Thus; 6.4 percent of the observations meet the criteria: "ceiling  $\geq 500$  feet with visibility  $> 1$  mile, but  $< 3$  miles; or ceiling  $\geq 500$  feet, but  $< 1500$  feet with visibility  $\geq 1$  mile."

Since these tabulations are prepared in several ways including by month, by 3-hour groups it is possible to determine diurnal variations of ceiling and visibility limits as well as probabilities of various ceiling-visibility combinations.

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/4AC

# CEILING VERSUS VISIBILITY

22111

LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

ALL

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5-16	≥ ¼	≥ 0
NO CEILING	78.9	79.3	79.3	79.4	79.4	79.4	79.4	79.4	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.5
≥ 20000	86.0	86.4	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 18000	86.6	87.0	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3
IV 16000	87.6	88.1	88.1	88.2	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
IV 14000	89.9	90.3	90.4	90.5	90.5	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
IV 12000	92.1	92.6	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9
IV 10000	93.5	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.3	94.3	94.3	94.3	94.3	94.3
IV 9000	93.9	94.5	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8
IV 8000	94.8	95.4	95.5	95.5	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
IV 7000	95.5	96.1	96.2	96.3	96.4	96.4	96.4	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 6000	96.5	97.1	97.2	97.3	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5
IV 5000	97.2	97.9	98.0	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.4
IV 4500	97.5	98.1	98.3	98.4	98.4	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 4000	97.8	98.5	98.7	98.7	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0
IV 3500	98.0	98.7	98.9	99.0	99.0	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 3000	98.2	99.0	99.1	99.2	99.3	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 2500	98.2	99.0	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 2000	98.3	99.1	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1800	98.3	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8
IV 1500	98.3	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
IV 1200	98.3	99.2	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1000	98.4	99.2	99.4	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 900	98.4	99.2	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 800	98.4	99.2	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 700	98.4	99.2	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 600	98.4	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 500	98.4	99.3	99.5	99.6	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 400	98.4	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 300	98.4	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 200	98.4	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 100	98.4	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 0	98.4	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

227469

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	¾	≥0
NO CEILING	72.3	72.9	73.0	73.1	73.1	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.3
≥ 20000	81.4	82.2	82.3	82.4	82.5	82.5	82.5	82.5	82.5	82.5	82.6	82.6	82.6	82.6	82.6	82.6
≥ 18000	82.2	83.0	83.1	83.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.4	83.4	83.4
≥ 16000	83.4	84.3	84.4	84.5	84.6	84.6	84.6	84.6	84.6	84.6	84.7	84.7	84.7	84.7	84.7	84.7
≥ 14000	85.6	86.4	86.6	86.6	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.9
≥ 12000	87.8	88.7	88.8	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.1	89.1
≥ 10000	89.1	90.0	90.2	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.5
≥ 9000	89.6	90.6	90.8	90.9	91.0	91.0	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 8000	90.6	91.6	91.8	91.9	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.2
≥ 7000	91.4	92.4	92.6	92.7	92.8	92.9	92.9	92.9	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0
≥ 6000	92.6	93.7	93.9	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.3
≥ 5000	94.0	95.2	95.4	95.5	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.9
≥ 4500	94.6	95.8	96.0	96.2	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.5	96.5	96.5
≥ 4000	95.1	96.5	96.8	96.9	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.3	97.3
≥ 3500	95.5	97.1	97.4	97.5	97.7	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0
≥ 3000	96.0	97.7	98.0	98.1	98.3	98.4	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6
≥ 2500	96.1	97.9	98.2	98.4	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.9	98.9
≥ 2000	96.3	98.1	98.5	98.7	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1800	96.3	98.2	98.6	98.8	99.0	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1500	96.4	98.3	98.7	98.8	99.1	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.5
≥ 1200	96.4	98.3	98.7	98.9	99.1	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.6
≥ 1000	96.4	98.4	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.7	99.7
≥ 900	96.4	98.4	98.8	99.0	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 800	96.4	98.4	98.8	99.0	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 700	96.4	98.4	98.8	99.0	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 600	96.5	98.4	98.8	99.0	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 500	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 400	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 300	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 200	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 100	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 0	96.5	98.4	98.9	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9

TOTAL NUMBER OF OBSERVATIONS

19200

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL  
HOURS 1-24

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 10	≥ 1	≥ 0
NO CEILING	74.3	74.5	74.5	74.5	74.5	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
≥ 20000	82.9	83.1	83.2	83.2	83.2	83.2	83.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 18000	83.6	83.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 16000	84.6	84.9	85.0	85.0	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 14000	86.9	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 12000	88.9	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.4	89.4	89.4	89.4	89.4	89.4
≥ 10000	90.8	91.0	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 9000	91.4	91.7	91.8	91.8	91.8	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 8000	92.5	92.8	92.9	92.9	92.9	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 7000	93.3	93.6	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 6000	94.8	95.2	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.5
≥ 5000	96.2	96.7	96.8	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 4500	96.7	97.2	97.3	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 4000	97.4	97.9	98.0	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3500	97.7	98.3	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7	98.7	98.7
≥ 3000	98.1	98.7	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.2
≥ 2500	98.3	98.9	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2000	98.4	99.1	99.2	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1800	98.4	99.1	99.3	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7
≥ 1500	98.4	99.2	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 1200	98.5	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	98.5	99.2	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 500	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 400	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 300	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
≥ 200	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0
≥ 100	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0
≥ 0	98.5	99.3	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

17096



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL  
HOURS 1-24

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	75.9 84.5	76.1 84.8	76.1 84.8	76.1 84.8	76.2 84.9	76.2 84.9	76.2 84.9	76.2 85.0	76.2 85.0	76.3 85.0	76.3 85.0	76.3 85.0	76.3 85.0	76.3 85.0	76.3 85.0	76.3 85.0
≥ 18000 ≥ 16000	85.3 86.4	85.5 86.7	85.5 86.7	85.6 86.7	85.6 86.8	85.6 86.8	85.7 86.8	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9	85.7 86.9
≥ 14000 ≥ 12000	87.6 89.5	88.1 89.8	88.2 89.9	88.2 89.9	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0	88.3 90.0
≥ 10000 ≥ 9000	90.6 91.2	91.1 91.5	91.1 91.6	91.1 91.6	91.2 91.7	91.2 91.7	91.2 91.7	91.2 91.7	91.2 91.7	91.3 91.7	91.3 91.7	91.3 91.7	91.3 91.7	91.3 91.7	91.3 91.7	91.3 91.7
≥ 8000 ≥ 7000	92.3 93.3	92.6 93.7	92.7 93.7	92.7 93.8	92.8 93.8	92.8 93.8	92.8 93.9	92.8 93.9	92.8 93.9	92.9 93.9	92.9 93.9	92.9 93.9	92.9 93.9	92.9 93.9	92.9 93.9	92.9 93.9
≥ 6000 ≥ 5000	94.7 96.0	95.0 96.4	95.1 96.4	95.1 96.5	95.2 96.5	95.2 96.5	95.2 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6	95.3 96.6
≥ 4500 ≥ 4000	96.4 97.1	96.8 97.6	96.8 97.6	96.9 97.7	97.0 97.8	97.0 97.8	97.0 97.8	97.0 97.8	97.0 97.8	97.1 97.9	97.1 97.9	97.1 97.9	97.1 97.9	97.1 97.9	97.1 97.9	97.1 97.9
≥ 3500 ≥ 3000	97.6 98.2	98.1 98.8	98.2 98.9	98.3 99.0	98.4 99.1	98.4 99.1	98.4 99.1	98.4 99.1	98.4 99.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.5 99.2	98.5 99.2	98.5 99.2
≥ 2500 ≥ 2000	98.4 98.5	99.0 99.2	99.1 99.3	99.2 99.4	99.3 99.5	99.3 99.5	99.4 99.6	99.4 99.6	99.4 99.6	99.4 99.6	99.4 99.6	99.4 99.6	99.4 99.6	99.4 99.7	99.4 99.7	99.4 99.7
≥ 1800 ≥ 1500	98.6 98.6	99.3 99.3	99.4 99.4	99.5 99.6	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7
≥ 1200 ≥ 1000	98.6 98.6	99.3 99.4	99.4 99.5	99.6 99.6	99.7 99.7	99.7 99.7	99.7 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
≥ 900 ≥ 800	98.6 98.6	99.4 99.4	99.5 99.5	99.6 99.6	99.7 99.8	99.7 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 700 ≥ 600	98.7 98.7	99.4 99.4	99.5 99.5	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 500 ≥ 400	98.7 98.7	99.4 99.4	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 300 ≥ 200	98.7 98.7	99.4 99.4	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 0	98.7 98.7	99.4 99.4	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

18501

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL  
HOURS 1-24

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING	81.5	81.8	81.9	81.9	81.9	81.9	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 20000	88.9	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 18000	89.5	89.8	89.9	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 16000	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 14000	91.4	91.6	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 12000	92.9	93.2	93.3	93.3	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
≥ 10000	94.1	94.4	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 9000	94.5	94.8	94.9	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 8000	95.3	95.7	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 7000	96.2	96.6	96.6	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 6000	97.3	97.7	97.8	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 5000	98.2	98.5	98.6	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 4500	98.4	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1
≥ 4000	98.8	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5
≥ 3500	98.9	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	99.0	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8
≥ 2500	99.1	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
≥ 2000	99.1	99.6	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.1	99.6	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.1	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.2	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 1000	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.2	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

18920

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL  
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 0
NO CEILING ≥ 20000	86.2	86.3	86.3	86.3	86.3	86.2	86.3	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
≥ 18000	93.5	93.6	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 16000	94.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 14000	94.7	94.9	94.9	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 12000	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 10000	97.2	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 9000	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2
≥ 8000	98.0	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 7000	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8
≥ 6000	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 5000	99.2	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 4500	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2000	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

19967

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	90.1	90.2	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 20000	94.0	94.2	94.2	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 18000	94.4	94.6	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 16000	95.2	95.5	95.5	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 14000	96.6	96.8	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1
≥ 12000	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 10000	98.2	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.8	98.8	98.8
≥ 9000	98.4	98.6	98.7	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 8000	98.8	99.0	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 7000	99.1	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6
≥ 6000	99.3	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 5000	99.4	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 4500	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

19066

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY - STATUTE MILES-															
	≥10	≥6	≥5	≥4	≥3	≥2	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1
NO CEILING	72.3	72.6	72.7	72.7	72.7	72.7	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
≥ 20000	80.4	80.7	80.8	80.9	80.9	80.9	80.9	80.9	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.0
≥ 18000	80.9	81.3	81.4	81.4	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5
≥ 16000	82.6	83.0	83.1	83.1	83.1	83.2	83.2	83.2	83.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 14000	88.2	88.6	88.7	88.8	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 12000	93.3	92.7	93.8	93.9	94.0	94.0	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 10000	95.5	96.0	96.1	96.2	96.2	96.3	96.3	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 9000	96.1	96.6	96.7	96.8	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.1	97.1
≥ 8000	97.0	97.6	97.7	97.8	97.9	97.9	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.2
≥ 7000	97.7	98.3	98.5	98.6	98.7	98.7	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	99.0
≥ 6000	98.1	98.8	98.9	99.0	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4
≥ 5000	98.3	99.0	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7
≥ 4500	98.4	99.1	99.2	99.3	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 4000	93.4	99.1	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8
≥ 3500	98.4	99.1	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8
≥ 3000	98.4	99.1	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9
≥ 2500	98.4	99.2	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9
≥ 2000	98.4	99.2	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 1800	98.4	99.2	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 1500	98.4	99.2	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 1200	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 1000	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 900	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 800	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 700	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 600	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 500	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 400	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 300	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 200	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 100	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9
≥ 0	98.4	99.2	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

19803

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/ETAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX 42-46,51-71 AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2	≥2	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1
NO CEILING ≥ 20000	72.2	72.4	72.4	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
≥ 18000	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
IV 16000	83.2	83.5	83.6	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.8
IV 14000	88.3	88.6	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9
IV 12000	92.2	92.6	92.7	92.7	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	93.0	93.0
IV 10000	94.2	94.6	94.7	94.7	94.8	94.8	94.9	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0
IV 9000	94.9	95.3	95.5	95.5	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.8	95.8
IV 8000	96.0	96.5	96.7	96.8	96.9	96.9	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.1
IV 7000	96.7	97.3	97.5	97.6	97.6	97.7	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.9	97.9
IV 6000	97.4	98.2	98.4	98.5	98.6	98.6	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.9	98.9
IV 5000	97.8	98.6	98.8	98.9	99.0	99.0	99.1	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.4
IV 4500	97.8	98.6	98.9	99.0	99.1	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.4	99.4
IV 4000	98.0	98.8	99.0	99.1	99.2	99.2	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6
IV 3500	98.0	98.8	99.1	99.2	99.3	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.7
IV 3000	98.0	98.8	99.1	99.2	99.3	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.7	99.7
IV 2500	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7
IV 2000	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.8	99.8
IV 1800	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.8	99.8
IV 1500	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.8	99.8
IV 1200	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 1000	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 900	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 800	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 700	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 600	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 500	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 400	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 300	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 200	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 100	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8
IV 0	98.1	98.9	99.2	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

19314

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

## CEILING VERSUS VISIBILITY

22111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.15	≥0.1	≥0.05	≥0.025	≥0
NO CEILING	86.3	86.4	86.4	86.4	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 20000	89.2	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 18000	89.5	89.5	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 16000	90.2	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 14000	92.1	92.2	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 12000	94.3	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 10000	95.7	95.9	95.9	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 9000	96.2	96.4	96.4	96.5	96.5	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 8000	97.0	97.2	97.2	97.3	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 7000	97.5	97.7	97.7	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.0	98.0
≥ 6000	98.4	98.7	98.7	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 5000	98.8	99.0	99.1	99.1	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 4500	98.8	99.1	99.2	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4000	99.0	99.3	99.4	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.1	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500	99.2	99.5	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.2	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.2	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.2	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.2	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.2	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	99.2	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

18689

USAF ETAC

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

ECT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .2	≥ .1	≥ .05	≥ .03	≥ 0
NO CEILING	84.3	84.5	84.5	84.5	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
≥ 20000	89.6	89.8	89.9	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 18000	90.2	90.4	90.5	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 16000	90.7	91.0	91.0	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 14000	92.2	92.5	92.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 12000	93.9	94.2	94.2	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 10000	94.9	95.2	95.3	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 9000	95.2	95.5	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 8000	96.1	96.5	96.5	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 7000	96.6	97.1	97.1	97.2	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 6000	97.6	98.1	98.2	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 5000	98.4	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 4500	99.3	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 4000	99.8	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.8	99.4	99.5	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3000	99.9	99.5	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.9	99.5	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.9	99.5	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	99.9	99.6	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

19309



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

## CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL  
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 2	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 1	≥ 0
NO CEILING	79.5	80.0	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 20000	86.2	86.7	86.8	86.8	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
≥ 18000	87.0	87.6	87.7	87.7	87.7	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8
≥ 16000	87.9	88.4	88.5	88.5	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 14000	89.5	90.2	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 12000	91.2	91.9	92.0	92.0	92.1	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 10000	92.7	93.5	93.7	93.7	93.8	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 9000	93.2	94.0	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 8000	94.1	94.9	95.0	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 7000	94.9	95.7	95.9	95.9	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 6000	95.9	96.8	97.0	97.0	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 5000	96.9	97.8	98.0	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 4500	97.0	98.0	98.2	98.3	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 4000	97.4	98.4	98.6	98.7	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 3500	97.5	98.5	98.7	98.8	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 3000	97.8	98.8	99.0	99.1	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2500	97.9	99.0	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6
≥ 2000	98.0	99.1	99.4	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.0	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.0	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	98.0	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	98.0	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	98.0	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	98.1	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	98.1	99.2	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

18321

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

41-43, 51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

ALL

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥10	≥4	≥0
NO CEILING ≥ 20000	71.9 80.1	73.2 81.7	73.5 81.9	73.7 82.2	73.7 82.2	73.7 82.3	73.8 82.3	73.8 82.3	73.8 82.3	73.8 82.3	73.8 82.4	73.8 82.4	73.9 82.4	73.9 82.4	73.9 82.4	73.9 82.4
≥ 18000 ≥ 16000	80.8 81.7	82.4 83.3	82.7 83.6	82.9 83.8	83.0 83.9	83.0 83.9	83.0 83.9	83.1 84.0	83.1 84.0	83.1 84.0	83.1 84.0	83.1 84.0	83.1 84.0	83.1 84.0	83.1 84.0	83.2 84.1
≥ 14000 ≥ 12000	83.3 85.4	85.0 87.1	85.2 87.4	85.5 87.6	85.5 87.7	85.6 87.7	85.6 87.7	85.6 87.8	85.6 87.8	85.6 87.8	85.7 87.8	85.7 87.8	85.7 87.8	85.7 87.8	85.7 87.8	85.7 87.8
≥ 10000 ≥ 9000	87.0 89.9	88.7 89.6	88.9 89.9	89.2 90.1	89.3 90.2	89.3 90.2	89.3 90.3	89.3 90.3	89.3 90.3	89.3 90.3	89.4 90.3	89.4 90.3	89.4 90.4	89.4 90.4	89.4 90.4	89.4 90.4
≥ 8000 ≥ 7000	89.0 90.4	90.7 92.1	91.0 92.4	91.3 92.7	91.4 92.7	91.4 92.8	91.4 92.8	91.5 92.8	91.5 92.8	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9
≥ 6000 ≥ 5000	91.7 93.2	93.3 95.1	93.8 95.4	94.0 95.6	94.1 95.7	94.2 95.8	94.2 95.8	94.2 95.9	94.2 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9
≥ 4500 ≥ 4000	93.7 94.3	95.6 96.3	95.7 96.6	96.1 96.9	96.2 97.0	96.3 97.0	96.3 97.1	96.4 97.1	96.4 97.1	96.4 97.2	96.4 97.2	96.4 97.2	96.4 97.2	96.4 97.2	96.4 97.2	96.4 97.2
≥ 3500 ≥ 3000	94.8 95.2	95.8 97.4	97.2 97.9	97.5 98.2	97.6 98.3	97.7 98.4	97.7 98.4	97.8 98.5	97.8 98.5	97.8 98.5	97.8 98.5	97.8 98.5	97.9 98.6	97.9 98.6	97.9 98.6	97.9 98.6
≥ 2500 ≥ 2000	95.3 95.5	97.6 97.9	98.1 98.4	98.4 98.8	98.6 98.9	98.6 99.0	98.7 99.1	98.8 99.1	98.8 99.1	98.8 99.2	98.8 99.2	98.8 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2
≥ 1800 ≥ 1500	95.6 95.7	98.0 98.1	98.5 98.6	98.8 98.9	99.0 99.1	99.0 99.2	99.1 99.3	99.2 99.3	99.2 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5
≥ 1200 ≥ 1000	95.7 95.8	98.1 98.2	98.7 98.7	99.0 99.1	99.2 99.3	99.3 99.4	99.4 99.5	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7
≥ 900 ≥ 800	95.8 95.8	98.2 98.2	98.8 98.8	99.1 99.1	99.3 99.3	99.4 99.4	99.5 99.5	99.5 99.6	99.6 99.6	99.6 99.7	99.6 99.7	99.6 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7
≥ 700 ≥ 600	95.8 95.8	98.2 98.2	98.8 98.8	99.2 99.2	99.3 99.3	99.4 99.4	99.5 99.6	99.6 99.6	99.6 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
≥ 500 ≥ 400	95.8 95.8	98.2 98.2	98.8 98.8	99.2 99.2	99.4 99.4	99.5 99.5	99.6 99.6	99.7 99.7	99.7 99.7	99.7 99.8	99.7 99.8	99.8 99.8	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9
≥ 300 ≥ 200	95.8 95.8	98.2 98.3	98.8 98.8	99.2 99.2	99.4 99.4	99.5 99.5	99.6 99.7	99.7 99.8	99.7 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 100 0	95.8 95.8	98.3 98.3	98.9 98.9	99.2 99.2	99.4 99.4	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 100.0

TOTAL NUMBER OF OBSERVATIONS

19283

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 3/8	≥ 1/2	≥ 5/16	≥ 1/4	≥ 0
NO CEILING > 20000	78.9	79.3	79.3	79.4	79.5	79.5	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
≥ 18000	84.3	85.2	85.2	85.3	85.4	85.4	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5
≥ 16000	85.2	85.5	85.5	85.6	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 14000	86.1	86.4	86.5	86.5	86.6	86.7	86.7	86.7	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.8
≥ 12000	87.8	88.1	88.1	88.2	88.3	88.3	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 10000	89.7	90.0	90.1	90.1	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 9000	91.2	91.5	91.6	91.7	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 8000	91.4	91.8	91.8	92.0	92.1	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 7000	92.4	92.9	92.9	93.1	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 6000	93.0	93.5	93.5	93.7	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 5000	94.0	94.4	94.5	94.7	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 4500	95.4	96.1	96.1	96.3	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 4000	96.1	96.9	96.9	97.1	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 3500	96.6	97.6	97.7	97.9	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 3000	97.1	98.2	98.2	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 2500	97.5	98.8	98.9	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2000	97.5	99.0	99.1	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	97.5	99.0	99.2	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1500	97.6	99.0	99.2	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1200	97.6	99.0	99.2	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1000	97.6	99.0	99.2	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	97.6	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2393

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/4AC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	78.0	78.4	78.4	78.5	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.9	78.9	78.9	79.0
≥ 20,000	84.2	84.6	84.7	84.8	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.1	85.1	85.1	85.1	85.2
≥ 18000	84.7	85.1	85.1	85.2	85.4	85.4	85.4	85.4	85.4	85.5	85.5	85.5	85.6	85.6	85.6	85.7
≥ 16000	84.4	85.8	85.9	86.0	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.3	86.3	86.3	86.3	86.4
≥ 14000	86.6	86.9	87.0	87.1	87.3	87.3	87.3	87.3	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.6
≥ 12000	88.3	88.7	88.7	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.2	89.2	89.2	89.3
≥ 10000	89.5	90.0	90.0	90.1	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.6
≥ 9000	89.9	90.4	90.5	90.6	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	91.0	91.0	91.0	91.1
≥ 8000	91.2	91.8	91.8	91.9	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.3	92.3	92.3	92.3	92.4
≥ 7000	92.2	92.8	92.8	92.9	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.4	93.4	93.4	93.5
≥ 6000	93.6	94.2	94.2	94.3	94.7	94.7	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	95.0
≥ 5000	95.1	95.8	95.9	96.0	96.3	96.3	96.3	96.3	96.4	96.4	96.4	96.5	96.5	96.5	96.5	96.6
≥ 4500	95.0	96.3	96.4	96.5	96.8	96.8	96.9	96.9	96.9	97.1	97.1	97.1	97.2	97.2	97.2	97.3
≥ 4000	96.0	96.8	96.9	97.0	97.4	97.4	97.4	97.4	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.8
≥ 3500	96.4	97.4	97.6	97.7	98.1	98.1	98.1	98.1	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.5
≥ 3000	96.8	97.8	98.0	98.1	98.5	98.5	98.5	98.5	98.6	98.8	98.8	98.8	98.8	98.8	98.8	99.0
≥ 2500	96.9	98.1	98.3	98.4	98.8	98.8	98.8	98.8	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.3
≥ 2000	97.0	98.1	98.3	98.4	98.9	98.9	99.0	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.4
≥ 1800	97.0	98.2	98.4	98.5	99.0	99.0	99.1	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.5
≥ 1500	97.1	98.3	98.5	98.6	99.2	99.2	99.3	99.3	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.7
≥ 1200	97.1	98.3	98.5	98.7	99.2	99.2	99.3	99.3	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.7
≥ 1000	97.2	98.3	98.6	98.7	99.3	99.3	99.3	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.8
≥ 900	97.2	98.3	98.6	98.7	99.3	99.3	99.4	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8
≥ 800	97.2	98.3	98.6	98.7	99.3	99.3	99.4	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8
≥ 700	97.2	98.3	98.6	98.7	99.3	99.3	99.5	99.5	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.9
≥ 600	97.2	98.4	98.7	98.8	99.3	99.4	99.5	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	100.0
≥ 500	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0
≥ 400	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0
≥ 300	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0
≥ 200	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0
≥ 100	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0
≥ 0	97.2	98.4	98.7	98.8	99.3	99.4	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

2405

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING	73.8	74.1	74.1	74.2	74.4	74.4	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.7	74.8
≥ 20000	60.7	61.0	61.0	61.0	61.3	61.3	61.5	61.5	61.5	61.6	61.6	61.6	61.6	61.6	61.7	61.7
≥ 18000	61.1	61.5	61.5	61.5	61.8	61.8	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.1	62.2
≥ 16000	62.9	63.3	63.3	63.3	63.5	63.6	63.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.9	64.0
≥ 14000	64.5	64.8	64.8	64.9	65.1	65.2	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.5	65.5
≥ 12000	67.1	67.5	67.5	67.5	67.8	67.8	68.0	68.0	68.0	68.1	68.1	68.1	68.1	68.1	68.2	68.2
≥ 10000	68.2	68.8	68.8	68.8	69.1	69.1	69.3	69.3	69.3	69.4	69.4	69.4	69.4	69.4	69.4	69.5
≥ 9000	69.2	69.8	69.8	69.9	70.1	70.2	70.4	70.4	70.4	70.5	70.5	70.5	70.5	70.5	70.6	70.6
≥ 8000	70.3	70.9	70.9	71.0	71.3	71.4	71.5	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.7	71.7
≥ 7000	70.8	71.4	71.4	71.5	71.9	71.9	72.1	72.1	72.1	72.2	72.2	72.2	72.2	72.2	72.3	72.3
≥ 6000	71.6	72.4	72.6	72.6	73.0	73.1	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.4	73.4
≥ 5000	73.6	74.5	74.6	74.7	75.1	75.1	75.3	75.3	75.3	75.4	75.4	75.4	75.4	75.4	75.5	75.6
≥ 4500	74.1	75.0	75.1	75.2	75.6	75.7	75.8	75.9	75.9	76.0	76.0	76.0	76.0	76.0	76.1	76.1
≥ 4000	74.6	75.7	75.8	75.9	76.4	76.5	76.7	76.7	76.7	76.8	76.8	76.8	76.8	76.8	76.9	76.9
≥ 3500	75.3	76.6	76.6	76.9	77.3	77.5	77.7	77.7	77.7	77.8	77.8	77.8	77.8	77.8	77.9	77.9
≥ 3000	75.8	77.2	77.4	77.5	78.0	78.1	78.3	78.4	78.4	78.5	78.5	78.5	78.5	78.5	78.6	78.6
≥ 2500	76.0	77.5	77.7	77.9	78.3	78.4	78.6	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.9	79.0
≥ 2000	76.1	77.6	77.8	78.0	78.4	78.5	78.8	78.8	78.8	79.0	79.0	79.0	79.0	79.0	79.1	79.1
≥ 1800	76.3	77.8	78.0	78.2	78.6	78.6	79.0	79.1	79.1	79.3	79.3	79.3	79.3	79.3	79.4	79.4
≥ 1500	76.3	77.8	78.0	78.2	78.7	78.8	79.0	79.2	79.2	79.3	79.3	79.3	79.3	79.3	79.4	79.4
≥ 1200	76.3	77.8	78.0	78.2	78.7	78.8	79.0	79.2	79.2	79.3	79.3	79.3	79.3	79.3	79.4	79.5
≥ 1000	76.4	77.9	78.1	78.3	78.8	78.9	79.1	79.3	79.3	79.5	79.5	79.5	79.5	79.5	79.6	79.6
≥ 900	76.4	77.9	78.2	78.4	78.8	79.0	79.3	79.5	79.5	79.7	79.7	79.7	79.7	79.7	79.8	79.8
≥ 800	76.4	77.9	78.2	78.4	78.8	79.0	79.3	79.5	79.5	79.7	79.7	79.7	79.7	79.7	79.8	79.8
≥ 700	76.4	77.9	78.2	78.4	78.8	79.0	79.3	79.5	79.5	79.7	79.7	79.7	79.7	79.7	79.8	79.8
≥ 600	76.4	77.9	78.2	78.4	78.8	79.0	79.3	79.5	79.5	79.7	79.7	79.7	79.7	79.7	79.8	79.8
≥ 500	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0
≥ 400	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0
≥ 300	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0
≥ 200	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0
≥ 100	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0
≥ 0	76.4	77.9	78.2	78.4	78.8	79.0	79.4	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.9	100.0

TOTAL NUMBER OF OBSERVATIONS

2406

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS - 1.51

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.1	≥0
NO CEILING	65.3	69.8	70.0	70.2	70.2	70.3	70.3	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
≥ 20000	77.6	78.3	78.6	78.8	78.8	78.9	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
≥ 18000	79.1	79.8	80.1	80.3	80.3	80.4	80.4	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
IV 16000	80.8	81.6	81.9	82.0	82.0	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
IV 14000	84.1	85.0	85.2	85.4	85.4	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
IV 12000	86.1	87.0	87.2	87.4	87.4	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
IV 10000	87.8	88.7	88.9	89.1	89.1	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
IV 9000	88.4	89.4	89.6	89.8	89.8	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
IV 8000	89.6	90.6	90.9	91.1	91.1	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
IV 7000	90.3	91.4	91.7	91.9	91.9	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
IV 6000	91.3	92.5	92.9	93.1	93.1	93.3	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
IV 5000	92.5	93.9	94.2	94.4	94.5	94.7	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
IV 4500	92.9	94.3	94.7	94.9	95.0	95.2	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
IV 4000	93.2	94.7	95.2	95.4	95.5	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
IV 3500	93.5	95.1	95.5	95.7	95.9	96.3	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
IV 3000	94.2	96.0	96.4	96.7	96.9	97.2	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
IV 2500	94.4	96.3	96.8	97.1	97.4	97.7	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 2000	94.6	96.7	97.4	97.7	98.0	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 1800	94.7	96.8	97.6	97.9	98.2	98.5	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 1500	94.8	97.0	97.7	98.0	98.3	98.7	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 1200	94.8	97.0	97.7	98.0	98.3	98.7	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 1000	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 900	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 800	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 700	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 600	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 500	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 400	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 300	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 200	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 100	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 0	95.0	97.2	98.0	98.2	98.6	99.0	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# CEILING VERSUS VISIBILITY

22111

LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS TST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.4	≥1	≥.75	≥.5	≥.4	≥.3	≥.25	≥.2
NO CEILING	65.6	66.5	66.9	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
≥ 20000	76.5	80.4	80.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
≥ 18000	79.7	81.3	81.8	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 16000	81.2	82.8	83.2	83.3	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 14000	83.5	85.1	85.6	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 12000	85.9	87.5	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 10000	87.4	89.0	89.4	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 9000	88.0	89.8	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 8000	89.0	90.8	91.3	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 7000	89.0	91.6	92.1	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 6000	90.6	92.5	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 5000	92.1	94.0	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 4500	92.5	94.4	95.0	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 4000	93.1	95.0	95.7	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 3500	93.0	95.9	96.5	96.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 3000	94.3	96.5	97.2	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 2500	94.5	96.8	97.5	97.7	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 2000	94.8	97.3	98.1	98.3	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1800	94.8	97.4	98.2	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1500	94.9	97.5	98.4	98.7	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 1200	95.0	97.6	98.5	98.8	99.0	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3
≥ 1000	95.1	97.8	98.7	99.0	99.1	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900	95.1	97.8	98.7	99.0	99.1	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800	95.1	97.8	98.8	99.0	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700	95.1	97.8	98.8	99.0	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	95.1	97.9	98.9	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	95.1	97.9	98.9	99.2	99.5	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	95.1	98.0	99.0	99.3	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	95.1	98.0	99.0	99.3	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	95.1	98.0	99.0	99.3	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	95.1	98.0	99.0	99.3	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	95.1	98.0	99.0	99.3	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2404

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/1AC

## CEILING VERSUS VISIBILITY

28111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.4	≥ 1	≥ .5	≥ .4	≥ .3	≥ .25	≥ .2	≥ 0
NO CEILING	64.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
≥ 20000	78.3	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
≥ 18000	79.7	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 16000	81.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 14000	83.5	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
≥ 12000	86.4	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
≥ 10000	88.0	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 9000	88.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 8000	89.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 7000	90.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 6000	91.8	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 5000	93.1	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 4500	93.7	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 4000	94.4	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 3500	94.8	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 3000	95.5	98.0	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 2500	95.6	98.2	98.3	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 2000	95.8	98.5	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 1800	95.8	98.6	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 1500	95.8	98.7	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1200	95.8	98.7	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1000	95.8	98.8	99.1	99.2	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 900	95.8	98.8	99.1	99.2	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 800	95.8	98.8	99.2	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	95.8	98.8	99.2	99.3	99.5	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	95.8	98.8	99.2	99.3	99.5	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	95.8	98.9	99.2	99.3	99.6	99.6	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	95.8	98.9	99.2	99.3	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	95.8	98.9	99.2	99.3	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	95.8	98.9	99.2	99.3	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	95.8	98.9	99.2	99.3	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	95.8	98.9	99.2	99.3	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2403



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING ≥ 20000	70.9	71.2	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 18000	81.2	81.5	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 16000	83.2	83.9	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 14000	85.7	86.5	86.6	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 12000	88.5	89.2	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 10000	89.7	90.5	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 9000	90.2	91.1	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 8000	91.0	91.8	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 7000	91.9	92.8	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 6000	93.5	94.4	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 5000	95.0	95.9	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 4500	95.7	96.7	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 4000	96.2	97.0	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 3500	96.5	97.9	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 3000	96.6	98.1	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 2500	96.7	98.3	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2000	97.1	98.7	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1800	97.1	98.7	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1500	97.2	98.7	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1200	97.2	98.7	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1000	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 900	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 800	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 400	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 300	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 200	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 100	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 0	97.2	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5

TOTAL NUMBER OF OBSERVATIONS

2399

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)																
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ 0.5	≥ 0.25	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01	≥ 0.005	≥ 0
NO CEILING ≥ 20000	77.8	78.3	78.3	78.3	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
≥ 18000	85.9	86.5	86.6	86.6	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 16000	86.5	87.1	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 14000	88.5	89.2	89.3	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 12000	90.3	90.9	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 10000	91.0	91.7	91.8	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 9000	91.3	92.0	92.1	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 8000	92.3	93.0	93.1	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 7000	93.1	93.8	93.9	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 6000	94.3	95.0	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 5000	95.4	96.3	96.4	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 4500	95.8	96.9	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 4000	96.5	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3500	97.0	98.5	98.7	98.8	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 3000	97.2	99.0	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 2500	97.2	99.0	99.2	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 2000	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1500	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1200	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1000	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 800	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 600	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 500	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 400	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 200	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 100	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 0	97.2	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

2393

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

21111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS (EST)

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1
NO CEILING	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
≥ 20000	84.6	84.7	84.8	84.8	84.8	84.8	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
≥ 18000	85.1	85.2	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.5	85.5
≥ 16000	86.0	86.1	86.2	86.2	86.2	86.2	86.3	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
≥ 14000	88.3	88.3	88.4	88.4	88.5	88.5	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.7
≥ 12000	90.5	90.5	90.6	90.6	90.7	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.9	90.9
≥ 10000	92.0	92.1	92.2	92.2	92.3	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.5	92.5
≥ 9000	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.8	92.8
≥ 8000	93.4	93.4	93.5	93.5	93.6	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.8	93.8
≥ 7000	94.3	94.4	94.6	94.6	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.9	94.9
≥ 6000	95.8	96.0	96.2	96.2	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 5000	97.3	97.5	97.7	97.7	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.0
≥ 4500	97.5	97.8	98.0	98.0	98.1	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 4000	97.8	98.2	98.4	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7	98.7
≥ 3500	98.1	98.5	98.6	98.7	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0	99.0
≥ 3000	98.4	98.8	99.0	99.0	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.4
≥ 2500	98.5	99.0	99.2	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 2000	98.7	99.2	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8
≥ 1800	98.7	99.3	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
≥ 1500	98.7	99.3	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
≥ 1200	98.7	99.3	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
≥ 1000	98.8	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 900	98.8	99.3	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 800	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.8	99.3	99.6	99.6	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2136

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX 42-46, 52-72 FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 3/8	≥ 7/16	≥ 1/2	≥ 1/4	≥ 0
NO CEILING	78.7	79.0	79.0	79.0	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
≥ 20000	84.9	85.1	85.2	85.2	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 18000	85.2	85.4	85.4	85.4	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
≥ 16000	85.9	86.2	86.2	86.2	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
≥ 14000	87.7	87.9	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 12000	89.6	89.9	89.9	89.9	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 10000	91.6	91.9	92.0	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 9000	92.5	92.8	92.8	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 8000	93.5	93.9	93.9	93.9	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 7000	94.4	94.7	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 6000	95.8	96.2	96.2	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 5000	97.1	97.5	97.5	97.5	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.8
≥ 4500	97.4	97.9	97.9	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2
≥ 4000	97.5	98.0	98.1	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 3500	97.8	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7
≥ 3000	98.2	98.8	98.9	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 2500	98.5	99.2	99.3	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 2000	98.7	99.3	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 1800	98.7	99.4	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.7	99.4	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 1200	98.8	99.5	99.6	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	98.8	99.5	99.6	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.9	99.6	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2135

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS LST

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥.5	≥.25	≥.1	≥.05	≥.025	≥.01	≥0
NO CEILING ≥ 20000	75.2	75.2	75.2	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 18000	82.2	82.4	82.4	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
≥ 16000	82.9	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
≥ 14000	84.3	84.4	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 12000	85.8	85.9	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 10000	88.6	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 9000	90.8	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 8000	91.4	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 7000	92.6	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 6000	93.6	93.8	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 5000	95.0	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.4
≥ 4500	96.7	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.4
≥ 4000	97.2	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	98.0
≥ 3500	97.8	98.2	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.6
≥ 3000	98.1	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.9
≥ 2500	98.4	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.2
≥ 2000	98.6	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1800	98.7	99.3	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1500	98.7	99.3	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1200	98.7	99.3	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1000	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 800	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 600	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 500	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 400	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 200	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 100	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 0	98.8	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

2137

1

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING ≥ 20000	73.6	73.7	73.9	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
≥ 18000	82.9	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 16000	83.4	83.5	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 14000	84.4	84.5	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 12000	86.3	86.4	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 10000	88.3	88.5	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 9000	90.5	90.7	90.9	90.9	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 8000	91.2	91.4	91.6	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 7000	92.3	92.6	92.7	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 6000	92.3	93.3	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 5000	94.8	95.2	95.3	95.4	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 4500	96.0	96.5	96.6	96.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 4000	96.3	96.8	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 3500	97.3	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3000	97.8	98.4	98.5	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 2500	98.3	98.9	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 2000	98.3	98.9	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1800	98.3	99.1	99.2	99.3	99.3	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1500	98.3	99.2	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1200	98.3	99.2	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1000	98.3	99.2	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	98.6	99.2	99.3	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2137

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

2311 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1400-1400

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING ≥ 20000	70.8	70.8	70.9	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
IV 18000	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
IV 16000	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
IV 14000	85.1	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.8
IV 12000	87.4	87.9	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
IV 10000	88.6	89.1	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
IV 9000	89.0	89.7	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0
IV 8000	89.9	90.6	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
IV 7000	90.4	91.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.4	91.4	91.4	91.4	91.4	91.4
IV 6000	91.7	92.6	92.7	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 5000	92.3	94.2	94.4	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
IV 4500	94.1	95.0	95.3	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
IV 4000	95.3	96.2	96.4	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7
IV 3500	96.2	97.1	97.3	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
IV 3000	97.0	98.1	98.3	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 2500	97.3	98.5	98.7	98.8	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 2000	97.5	98.7	98.9	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 1800	97.8	98.9	99.2	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6
IV 1500	97.8	99.0	99.3	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 1200	97.8	99.1	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1000	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 900	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 800	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 700	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 600	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 400	97.8	99.1	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300	97.8	99.2	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	97.9	99.2	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	97.9	99.2	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	97.9	99.2	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2136

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46-52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	68.2	68.5	68.6	68.6	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.8	68.8
≥ 20000	80.4	80.7	80.8	80.8	80.8	80.8	80.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	81.0	81.0
≥ 18000	81.7	82.0	82.1	82.1	82.1	82.1	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.3	82.3
≥ 15000	83.1	83.3	83.5	83.5	83.5	83.5	83.5	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.7	83.7
≥ 14000	84.8	85.1	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.5	85.5
≥ 12000	86.9	87.2	87.4	87.4	87.4	87.4	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.6	87.6
≥ 10000	88.7	89.1	89.3	89.3	89.3	89.3	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.5	89.5
≥ 9000	89.2	89.7	89.9	89.9	89.9	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 8000	90.4	90.9	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.3	91.3
≥ 7000	91.4	91.9	92.1	92.1	92.1	92.1	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.3	92.3
≥ 6000	93.0	93.5	93.7	93.7	93.7	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.9	93.9
≥ 5000	94.9	95.4	95.7	95.7	95.7	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.9	95.9
≥ 4500	95.7	96.3	96.5	96.6	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.8	96.8
≥ 4000	96.9	97.5	97.7	97.8	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.0
≥ 3500	97.4	98.0	98.3	98.3	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.6	98.6
≥ 3000	97.7	98.4	98.6	98.7	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1
≥ 2500	97.8	98.6	98.9	98.9	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3
≥ 2000	97.9	98.6	99.0	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.4
≥ 1800	97.9	98.7	99.0	99.1	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5
≥ 1500	98.0	98.7	99.1	99.2	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7
≥ 1200	98.0	98.7	99.1	99.2	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8
≥ 1000	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 900	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 800	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 700	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 600	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 500	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 400	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 300	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 200	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 100	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
≥ 0	98.0	98.8	99.2	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2120



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS -151

CEILING 'FEET'	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥4	≥0
NO CEILING	73.5	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
≥ 20000	82.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
IV 18000	83.6	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
IV 16000	84.7	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
IV 14000	88.1	88.3	88.3	88.4	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
IV 12000	89.7	89.9	89.9	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
IV 10000	91.3	91.5	91.5	91.6	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
IV 9000	92.3	92.5	92.5	92.6	92.6	92.6	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
IV 8000	93.4	93.6	93.6	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
IV 7000	94.0	94.2	94.2	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
IV 6000	95.5	95.7	95.8	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
IV 5000	96.7	97.2	97.2	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
IV 4500	97.0	97.5	97.6	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV 4000	97.9	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 3500	98.1	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 3000	98.1	98.8	98.9	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 2500	98.2	98.9	99.0	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 2000	98.2	99.1	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 1800	98.2	99.2	99.2	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 1500	98.2	99.2	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 1200	98.3	99.2	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1000	98.3	99.3	99.3	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 900	98.3	99.3	99.3	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 800	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	98.3	99.4	99.5	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2141

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0	
NO CEILING ≥ 20000	76.2 84.0	76.3 84.0	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1	76.3 84.1
≥ 18000 ≥ 16000	84.7 86.1	84.7 86.1	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2	84.8 86.2
≥ 14000 ≥ 12000	88.7 90.6	88.8 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7	88.9 90.7
≥ 10000 ≥ 9000	92.6 93.1	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2	92.7 93.2
≥ 8000 ≥ 7000	94.1 94.9	94.3 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1	94.4 95.1
≥ 6000 ≥ 5000	96.7 97.9	97.0 98.2	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3	97.0 98.3
≥ 4500 ≥ 4000	98.1 98.3	98.4 98.6	98.5 98.6	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7	98.5 98.7
≥ 3500 ≥ 3000	98.4 98.7	98.7 99.1	98.8 99.2	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5	98.9 99.5
≥ 2500 ≥ 2000	98.7 98.7	99.2 99.2	99.3 99.3	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7	99.7 99.7
≥ 1800 ≥ 1500	98.7 98.8	99.2 99.3	99.3 99.4	99.7 99.7	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8
≥ 1200 ≥ 1000	98.8 98.9	99.3 99.4	99.4 99.5	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9
≥ 900 ≥ 800	98.9 98.9	99.4 99.4	99.5 99.5	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 700 ≥ 600	98.9 98.9	99.4 99.4	99.5 99.6	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 500 ≥ 400	98.9 98.9	99.4 99.4	99.6 99.6	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 300 ≥ 200	98.9 98.9	99.4 99.4	99.6 99.6	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 100 ≥ 0	98.9 98.9	99.4 99.4	99.6 99.6	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0

TOTAL NUMBER OF OBSERVATIONS

2144

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS U.S.T.

CEILING, FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 1/32	≥ 0
NO CEILING ≥ 20000	82.6	82.9	82.9	82.9	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
IV 18000	89.0	89.1	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
IV 16000	89.6	89.7	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
IV 14000	90.6	90.7	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
IV 12000	92.4	92.5	92.5	92.5	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
IV 10000	93.0	93.1	93.1	93.1	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
IV 9000	93.4	93.5	93.5	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
IV 8000	94.7	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
IV 7000	95.6	95.7	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
IV 6000	96.8	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
IV 5000	97.7	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 4500	97.9	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
IV 4000	98.2	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
IV 3500	98.9	99.1	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 3000	99.2	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 2500	99.3	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 2000	99.4	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1800	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 1500	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.5	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2313

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

2311 LUKE AFB ARIZONA/PHOENIX

42-45152-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.25	≥1	≥.75	≥.5	≥.25	≥.16	≥.1	≥0
NO CEILING	81.3	81.5	81.5	81.5	81.6	81.6	81.6	81.6	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 20000	87.5	87.7	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 18000	87.9	88.1	88.1	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
≥ 16000	88.4	88.5	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 14000	89.3	89.5	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 12000	91.1	91.3	91.3	91.3	91.4	91.4	91.4	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 10000	92.0	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 9000	92.8	92.9	93.0	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 8000	93.8	94.0	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 7000	94.5	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 6000	95.7	95.8	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 5000	96.7	96.8	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 4500	97.3	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 4000	97.8	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3500	98.5	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 3000	98.9	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 2500	99.1	99.4	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2000	99.3	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.3	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	99.3	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-45 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 3/8	≥ 1/2	≥ 1/8	≥ 0	≥ 0
NO CEILING ≥ 20000	74.6	74.9	75.0	75.0	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
≥ 18000	83.4	83.8	83.8	83.9	83.9	83.9	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 16000	85.2	85.5	85.6	85.6	85.7	85.7	85.7	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8
≥ 14000	87.4	87.8	87.8	87.9	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 12000	89.3	89.7	89.7	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 10000	90.7	91.0	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 9000	91.1	91.5	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 8000	92.5	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 7000	93.5	93.9	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 6000	94.5	94.9	95.0	95.0	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 5000	95.3	95.8	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 4500	96.6	96.1	96.1	96.2	96.3	96.3	96.3	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 4000	96.1	96.6	96.8	96.8	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 3500	96.6	97.2	97.3	97.4	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 3000	97.3	97.9	98.1	98.2	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 2500	97.5	98.3	98.4	98.6	98.8	98.8	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2000	97.7	98.4	98.7	98.8	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1800	97.7	98.5	98.7	98.9	99.1	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1500	97.8	98.7	98.9	99.1	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1200	97.8	98.7	99.0	99.1	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000	97.9	98.8	99.1	99.2	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	97.9	98.8	99.1	99.2	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 800	98.0	98.9	99.2	99.3	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	98.0	98.9	99.2	99.3	99.6	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	98.0	99.0	99.2	99.4	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.0	99.0	99.3	99.4	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

2316

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS -151

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥16	≥1	≥0
NO CEILING	73.0	73.4	73.4	73.4	73.4	73.4	73.4	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 20000	82.8	83.2	83.2	83.2	83.2	83.2	83.2	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.5	83.5
IV 18000	83.2	83.8	83.9	83.9	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.1	84.1	84.1
IV 16000	85.0	85.6	85.6	85.6	85.7	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.9	85.9
IV 14000	86.7	87.3	87.4	87.4	87.4	87.4	87.4	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.7	87.7
IV 12000	88.2	88.9	88.9	88.9	88.9	88.9	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.2	89.2
IV 10000	90.0	90.6	90.6	90.6	90.7	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.9	90.9
IV 9000	90.4	91.0	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.3	91.3	91.3
IV 8000	91.8	92.4	92.4	92.5	92.5	92.5	92.5	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
IV 7000	92.8	93.5	93.5	93.6	93.6	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.8	93.8	93.8
IV 6000	93.9	94.6	94.6	94.7	94.7	94.7	94.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
IV 5000	94.8	95.5	95.6	95.6	95.7	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9
IV 4500	95.0	95.8	95.8	95.9	95.9	95.9	95.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.2	96.2
IV 4000	95.6	96.4	96.5	96.5	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.8
IV 3500	96.1	97.0	97.0	97.1	97.2	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.4	97.4
IV 3000	96.9	98.0	98.1	98.2	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.5	98.5
IV 2500	97.1	98.2	98.3	98.5	98.6	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.8	98.8
IV 2000	97.4	98.5	98.6	98.8	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1
IV 1800	97.5	98.7	98.7	98.9	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2
IV 1500	97.6	98.9	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5
IV 1200	97.6	98.9	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5
IV 1000	97.6	99.0	99.1	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7
IV 900	97.6	99.0	99.1	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7
IV 800	97.6	99.1	99.2	99.4	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
IV 700	97.6	99.1	99.2	99.4	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8
IV 600	97.6	99.1	99.2	99.4	99.5	99.5	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9
IV 500	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 400	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 300	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 200	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 100	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 0	97.7	99.2	99.4	99.5	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2316

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS UTC

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥4	≥0
NO CEILING	71.0	71.3	71.3	71.4	71.6	71.6	71.6	71.6	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 20000	81.0	81.3	81.3	81.4	81.6	81.6	81.7	81.7	81.7	81.8	81.8	81.8	81.8	81.8	81.8	81.8
≥ 18000	82.2	82.5	82.5	82.6	82.8	82.8	82.9	82.9	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 16000	83.0	83.5	83.5	83.6	83.8	83.8	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 14000	84.7	85.2	85.2	85.3	85.5	85.5	85.6	85.6	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 12000	86.1	86.6	86.7	86.8	86.9	86.9	87.0	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 10000	87.3	87.8	87.9	88.0	88.1	88.1	88.2	88.2	88.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 9000	87.9	88.4	88.5	88.6	88.7	88.7	88.8	88.8	88.8	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 8000	88.6	89.1	89.2	89.4	89.5	89.5	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 7000	89.8	90.4	90.5	90.7	90.9	90.9	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 6000	91.9	92.6	92.7	92.9	93.0	93.0	93.1	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 5000	93.5	94.2	94.3	94.5	94.7	94.7	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 4500	93.9	94.6	94.7	94.9	95.1	95.1	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 4000	95.7	96.5	96.5	96.8	97.0	97.0	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 3500	96.2	97.0	97.1	97.4	97.6	97.6	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 3000	97.2	98.1	98.1	98.4	98.7	98.7	98.7	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2500	97.6	98.4	98.5	98.8	99.1	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 2000	98.0	98.9	99.0	99.3	99.6	99.6	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	98.0	98.9	99.0	99.3	99.6	99.6	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	98.0	98.9	99.0	99.3	99.6	99.6	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	98.0	98.9	99.0	99.3	99.6	99.6	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	98.0	98.9	99.0	99.3	99.6	99.6	99.7	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.0	98.9	99.1	99.4	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2310

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-45,52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS LT ST

CEILING FEET	VISIBILITY /STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1½	≥1	≥1	≥½	≥½	≥5/16	≥¼	≥0
NO CEILING ≥ 20000	68.8	69.1	69.1	69.2	69.2	69.2	69.2	69.2	69.2	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 18000	61.4	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.8	61.9	61.9	61.9	61.9	61.9	61.9
IV 16000	82.4	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.9	83.0	83.0	83.0	83.0	83.0	83.0
IV 14000	84.0	84.3	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.6	84.6	84.6	84.6	84.6	84.6	84.6
IV 12000	85.2	85.5	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7
IV 10000	87.0	87.3	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.6
IV 9000	88.1	88.4	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7
IV 8000	88.5	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	89.0	89.1	89.1	89.1	89.1	89.1	89.1
IV 7000	89.5	89.8	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.1	90.1	90.1	90.1	90.1	90.1
IV 6000	91.0	91.3	91.3	91.5	91.5	91.5	91.5	91.5	91.5	91.6	91.6	91.6	91.6	91.6	91.6	91.6
IV 5000	92.9	93.2	93.2	93.4	93.4	93.4	93.4	93.4	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5
IV 4500	95.2	95.5	95.5	95.7	95.7	95.7	95.7	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8
IV 4000	95.8	96.1	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5
IV 3500	97.0	97.4	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7
IV 3000	97.5	97.9	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2
IV 2500	98.4	99.0	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 2000	98.4	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 1800	98.5	99.2	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1500	98.5	99.2	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1200	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1000	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 900	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 800	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 700	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 600	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 500	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 400	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 300	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 200	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 100	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 0	98.5	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

2311



1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/PAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-45,52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS -15

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.0	≥0.5	≥0.25	≥0.15	≥0.10	≥0.05	≥0.025	≥0.01
NO CEILING ≥ 20000	73.3	73.5	73.5	73.5	73.5	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
≥ 18000	83.6	83.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 16000	84.9	85.1	85.1	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 14000	86.1	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 12000	87.8	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 10000	89.2	89.2	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 8000	91.3	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 6000	91.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 4000	92.7	92.9	92.9	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 3000	93.7	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 2500	95.2	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 2000	96.5	96.8	96.8	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 1800	97.1	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 1600	97.6	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1400	98.0	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 1200	98.6	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1000	98.7	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	98.8	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.8	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.9	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2311

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/NAAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS, U.S.T.

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.15	≥0.1	≥0.05	≥0.025	≥0
NO CEILING ≥ 20000	82.1	82.2	82.2	82.2	82.2	82.2	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 18000	88.7	88.8	88.8	88.8	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 16000	89.0	89.1	89.1	89.1	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 14000	89.9	90.0	90.0	90.0	90.0	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 12000	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 10000	92.7	92.8	92.8	92.8	92.8	92.8	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 9000	93.7	93.8	93.8	93.8	93.8	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 8000	94.1	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 7000	94.9	95.1	95.1	95.1	95.1	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 6000	95.8	95.9	95.9	95.9	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 5000	96.7	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 4500	98.0	98.3	98.3	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 4000	98.2	98.5	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 3500	98.7	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 3000	99.1	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2500	99.2	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.3	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	99.4	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

2313

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

## CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS - 11.5

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.1	≥0.05	≥0.025	≥0.01	≥0
NO CEILING	86.5	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
≥ 20000	91.5	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 18000	91.8	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
IV 16000	92.6	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 14000	93.7	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
IV 12000	95.2	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 10000	96.8	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
IV 9000	97.2	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 8000	97.7	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
IV 7000	98.4	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 6000	98.6	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 5000	99.1	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 4500	99.1	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 4000	99.2	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3500	99.2	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 3000	99.3	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.3	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 2000	99.3	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.4	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 1500	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2366

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .75	≥ .5	≥ .25	≥ .1	≥ 0	≥ 0	≥ 0
NO CEILING	86.4	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 20000	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 18000	91.5	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 16000	92.6	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 14000	93.5	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 12000	95.3	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 10000	96.3	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 9000	96.8	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 8000	97.5	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 7000	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 6000	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 5000	99.1	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 4500	99.2	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1600	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1400	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2365

USAF ETAC FORM 1-64 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS LT ST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	1.9	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
≥ 20000	8.5	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
≥ 18000	9.3	9.7	9.7	9.7	9.7	9.7	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
≥ 16000	9.4	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 14000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 12000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 10000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 9000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 8000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 7000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 6000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 5000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 4500	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 4000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 3500	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 3000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 2500	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 2000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 1800	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 1500	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 1200	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 1000	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 900	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 800	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 700	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 600	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 500	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 400	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 300	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 200	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 100	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
≥ 0	9.6	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/4	≥0
NO CEILING	79.8	80.4	80.5	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 20000	88.2	88.5	88.8	88.8	88.8	88.8	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
IV 18000	89.0	89.6	89.5	89.6	89.6	89.6	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
IV 16000	89.7	90.3	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
IV 14000	90.9	91.5	91.5	91.5	91.5	91.5	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
IV 12000	92.3	92.9	92.9	92.9	92.9	92.9	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
IV 10000	93.4	94.0	94.1	94.1	94.1	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
IV 9000	94.0	94.5	94.6	94.6	94.6	94.6	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
IV 8000	94.6	95.4	95.4	95.4	95.4	95.4	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
IV 7000	95.4	95.9	96.0	96.0	96.0	96.0	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
IV 6000	96.5	97.1	97.1	97.1	97.1	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
IV 5000	97.5	98.1	98.1	98.1	98.1	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 4500	97.7	98.4	98.4	98.4	98.4	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 4000	98.1	98.7	98.7	98.7	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 3500	98.4	99.0	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 3000	98.7	99.4	99.4	99.4	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 2500	98.8	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 2000	98.8	99.5	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1800	98.8	99.5	99.6	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1500	98.8	99.5	99.6	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1200	98.9	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1000	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.0	99.7	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2366

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

APR  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5 16	≥¼	≥0
NO CEILING	77.1	77.2	77.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 20000	86.8	86.9	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
IV 18000	87.5	87.6	87.7	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.9
IV 16000	88.1	88.2	88.3	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.5	88.5
IV 14000	89.4	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.8	89.8	89.8
IV 12000	90.7	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	91.0	91.0	91.0
IV 10000	91.7	91.8	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.1	92.1	92.1
IV 9000	92.0	92.1	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.4	92.4
IV 8000	92.7	92.8	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
IV 7000	94.0	94.1	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.5	94.5
IV 6000	95.9	96.0	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.4	96.4	96.4
IV 5000	96.9	97.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5
IV 4500	97.5	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2
IV 4000	98.4	98.7	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1
IV 3500	98.7	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4
IV 3000	98.9	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 2500	99.0	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8
IV 2000	99.1	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
IV 1800	99.1	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9
IV 1500	99.2	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
IV 1200	99.2	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
IV 1000	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 900	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 800	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 700	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 600	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 500	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 400	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 300	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 200	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 100	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
IV 0	99.2	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2364

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

STATION: 22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS (EST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ .	≥ 0
NO CEILING	75.2	75.6	75.7	75.7	75.8	75.8	75.8	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 20000	85.9	86.4	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 18000	86.5	87.0	87.1	87.1	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 16000	86.9	87.4	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
≥ 14000	88.1	88.7	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 12000	89.8	90.3	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 10000	90.9	91.4	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 9000	91.4	91.9	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
≥ 8000	92.5	93.1	93.2	93.2	93.3	93.3	93.3	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
≥ 7000	93.6	94.1	94.2	94.2	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 6000	95.8	96.3	96.4	96.5	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 5000	97.5	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 4500	98.1	98.6	98.8	98.9	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4000	98.5	99.1	99.2	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 3500	98.6	99.2	99.3	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	98.8	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500	98.6	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2000	98.6	99.4	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.6	99.4	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.6	99.4	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	98.6	99.4	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.7	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

2362



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# CEILING VERSUS VISIBILITY

23111 STATION LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 4	≥ 0
NO CEILING	79.9	80.1	80.1	80.1	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
≥ 20000	87.5	87.8	87.9	87.9	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 18000	88.5	88.8	88.9	88.9	89.0	89.0	89.0	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 16000	89.1	89.4	89.5	89.5	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 14000	90.3	90.7	90.7	90.7	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 12000	91.9	92.3	92.3	92.3	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 10000	93.1	93.5	93.5	93.5	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 9000	93.6	93.9	94.0	94.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 8000	94.5	94.9	95.0	95.0	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 7000	95.8	96.2	96.2	96.3	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 6000	97.3	97.7	97.7	97.8	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1	98.1
≥ 5000	98.1	98.5	98.6	98.6	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0
≥ 4500	98.3	98.7	98.8	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.2
≥ 4000	98.5	99.1	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.6
≥ 3500	98.9	99.3	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8
≥ 3000	98.9	99.4	99.5	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 2500	99.9	99.4	99.5	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 2000	98.9	99.4	99.5	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 1800	98.9	99.4	99.5	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 1500	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 1200	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 1000	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 900	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 800	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 700	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 600	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 500	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 400	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 300	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 200	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 100	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 0	99.0	99.4	99.5	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

2362

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 20000	91.3	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 18000	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 16000	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 14000	93.4	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 12000	95.1	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 10000	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 9000	96.8	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 8000	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 7000	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 6000	98.7	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 5000	99.1	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4500	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	99.3	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.3	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.3	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.3	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2000	99.3	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.3	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.3	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.3	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2369

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/NAAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS UT

CEILING FEET	VISIBILITY - STATUTE MILES -															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING ≥ 20000	91.7 94.7	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8	91.8 94.8
≥ 18000 ≥ 16000	95.1 95.7	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8	95.2 95.8
≥ 14000 ≥ 12000	97.3 98.2	97.4 98.3	97.4 98.3	97.4 98.3	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4	97.5 98.4
≥ 10000 ≥ 9000	98.9 99.0	99.0 99.0	99.0 99.0	99.0 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1
≥ 8000 ≥ 7000	99.2 99.3	99.3 99.4	99.3 99.4	99.4 99.4	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5
≥ 6000 ≥ 5000	99.5 99.6	99.6 99.8	99.6 99.8	99.6 99.8	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9	99.7 99.9
≥ 4500 ≥ 4000	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 3500 ≥ 3000	99.6 99.6	99.8 99.9	99.8 99.9	99.8 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 2500 ≥ 2000	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1800 ≥ 1500	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1200 ≥ 1000	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 900 ≥ 800	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 700 ≥ 600	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 500 ≥ 400	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 300 ≥ 200	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 0	99.6 99.6	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

AY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2	≥2	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥0
NO CEILING	90.9	91.0	91.0	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 20000	94.3	94.4	94.4	94.4	94.4	94.4	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 18000	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 16000	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 14000	96.8	96.9	96.9	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 12000	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 10000	98.8	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 9000	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 8000	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 7000	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 6000	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 5000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4500	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2499

DATA PROCESSING SECTION  
USAF ETAC  
AIR WEATHER SERVICE/ MC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800

CEILING, FEET	VISIBILITY, STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.0	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.10	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING ≤ 20000	5.4	65.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
≥ 18000 ≤ 16000	52.4	92.4	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 14000 ≤ 12000	5.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 10000 ≤ 9000	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 8000 ≤ 7000	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 6000 ≤ 5000	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 4500 ≤ 4000	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 3500 ≤ 3000	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 2500 ≤ 2000	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800 ≤ 1500	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200 ≤ 1000	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900 ≤ 800	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700 ≤ 600	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500 ≤ 400	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300 ≤ 200	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100 ≤ 0	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2494

1

DATA PROCESSING FRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

## CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0500-1100  
HOURS LST

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ 0.5	≥ 0.25	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01	≥ 0
NO CEILING	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
≥ 20000	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 18000	94.4	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 16000	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 14000	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 12000	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 10000	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 9000	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 8000	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 7000	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 6000	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 5000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4500	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 4000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2492

USAF ETAC 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING	83.0	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 20000	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.9
≥ 18000	94.4	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 16000	95.2	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.5
≥ 14000	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 12000	96.6	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 10000	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 9000	97.3	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.6
≥ 8000	97.7	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0
≥ 7000	98.2	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 6000	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5
≥ 5000	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4500	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
≥ 4000	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 STATION LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS -151

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .25	≥ .2	≥ .15	≥ .1	≥ 0
NO CEILING ≥ 20000	80.2 92.3	80.7 92.9	80.8 93.0	80.8 93.0	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	80.9 93.1	81.0 93.2	81.0 93.2	81.0 93.2
≥ 18000 IV 16000	93.0 93.6	93.6 94.1	93.7 94.2	93.7 94.2	93.7 94.3	93.7 94.3	93.8 94.4	93.8 94.4	93.8 94.4	93.8 94.4	93.8 94.4	93.8 94.4	93.8 94.4	93.9 94.5	93.9 94.5	93.9 94.5
IV 14000 IV 12000	95.1 95.7	95.7 96.3	95.7 96.4	95.7 96.4	95.8 96.5	95.8 96.5	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	96.0 96.7	96.0 96.7	96.0 96.7
IV 10000 IV 9000	96.1 96.3	96.7 96.9	96.8 97.0	96.8 97.0	96.9 97.1	96.9 97.1	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2
≥ 8000 IV 7000	97.0 97.7	97.6 98.3	97.7 98.4	97.7 98.4	97.8 98.5	97.8 98.5	97.9 98.6	97.9 98.6	97.9 98.6	98.0 98.6	98.0 98.6	98.0 98.6	98.0 98.6	98.0 98.7	98.0 98.7	98.0 98.7
≥ 6000 IV 5000	98.6 98.8	99.2 99.5	99.3 99.6	99.3 99.6	99.4 99.6	99.4 99.6	99.5 99.8	99.5 99.8	99.5 99.8	99.6 99.8	99.6 99.8	99.6 99.8	99.6 99.8	99.6 99.9	99.6 99.9	99.6 99.9
≥ 4500 IV 4000	98.9 98.9	99.5 99.5	99.6 99.6	99.6 99.6	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
IV 3500 IV 3000	98.9 98.9	99.5 99.5	99.6 99.7	99.6 99.7	99.7 99.8	99.7 99.8	99.8 99.9	99.8 99.9	99.9 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 2500 IV 2000	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1800 IV 1500	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1200 IV 1000	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 900 IV 800	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 700 IV 600	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 500 IV 400	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 300 IV 200	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 IV 0	98.9 98.9	99.5 99.5	99.7 99.7	99.7 99.7	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

2493



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

43-46,51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥4/16	≥0
NO CEILING	83.1	83.4	83.4	83.4	83.4	83.4	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
≥ 20000	93.0	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.4	93.4	93.4	93.4	93.4
≥ 18000	93.5	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 16000	94.1	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.5	94.5	94.5	94.5	94.5
≥ 14000	95.7	96.0	96.0	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 12000	96.4	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8
≥ 10000	96.9	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4
≥ 9000	97.1	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6
≥ 8000	97.8	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.4
≥ 7000	98.0	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.6	98.6	98.6
≥ 6000	98.8	99.1	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4
≥ 5000	99.2	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
≥ 4500	99.2	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 3500	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 2000	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 900	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 800	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 700	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 600	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 500	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 400	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 300	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 200	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 100	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 0	99.3	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS 2498

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS LT

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥5 16	≥¼
NO CEILING	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 20000	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 18000	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 16000	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 14000	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 12000	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 10000	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 9000	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 8000	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 7000	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 6000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 5000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2494

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/14C

# CEILING VERSUS VISIBILITY

2111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS, U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)																
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥⅓	≥⅒	≥⅑	≥⅛	≥0
NO CEILING ≥ 20000	92.1	92.2	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 18000	95.3	95.3	95.3	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 16000	95.6	95.6	95.6	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 14000	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 12000	97.2	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 10000	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 9000	98.7	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 8000	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 7000	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 6000	99.3	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 5000	99.5	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 4500	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.6	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS T S T

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	91.2	91.3	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 20000	94.2	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 18000	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 16000	94.9	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 14000	96.6	96.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 12000	98.1	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 10000	98.5	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 9000	98.7	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 8000	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 7000	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 6000	99.6	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 5000	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4500	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS 451

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
IV 20000	92.7	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 18000	93.3	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
IV 16000	94.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
IV 14000	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
IV 12000	97.8	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 10000	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 9000	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 8000	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 7000	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 6000	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 5000	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4500	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4000	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3500	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3000	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2500	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2000	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1800	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1500	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

STATION 22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	≥5/16	¾	≥0
NO CEILING	89.0	89.0	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 20000	92.8	92.7	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 18000	93.1	93.3	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 16000	94.5	94.7	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 14000	96.3	96.5	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 12000	97.9	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 10000	98.2	98.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 9000	98.5	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 8000	99.1	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 7000	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 6000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 5000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 4500	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2382

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-45,51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS LT

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING ≥ 20000	90.2	90.3	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
IV 18000	94.2	94.3	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
IV 16000	94.6	94.9	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
IV 14000	96.0	96.1	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
IV 12000	97.3	97.4	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
IV 10000	98.2	98.4	98.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
IV 9000	98.7	98.8	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 8000	98.9	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 7000	99.2	99.3	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 6000	99.4	99.5	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 5000	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4500	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4000	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3500	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3000	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2500	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2000	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1800	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1500	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.5	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2382

1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 STATION LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	89.5	89.7	89.8	89.8	89.8	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 20000	95.1	95.3	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6
IV 18000	95.4	95.6	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9
IV 16000	96.1	96.4	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6
IV 14000	97.0	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5
IV 12000	97.9	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
IV 10000	98.3	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
IV 9000	98.4	98.6	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 8000	98.6	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 7000	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 6000	99.4	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 5000	99.5	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4500	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 4000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3500	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 3000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2500	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 2000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1800	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1500	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.5	99.7	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2386



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,53-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	88.5	88.7	88.8	88.8	88.8	88.8	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0
≥ 20000	93.0	94.2	94.3	94.3	94.3	94.4	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6
IV 18000	94.3	94.7	94.8	94.8	94.8	94.9	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1
IV 16000	95.2	95.5	95.6	95.6	95.7	95.7	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	96.0	96.0
IV 14000	96.1	96.3	96.6	96.6	96.7	96.7	96.9	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.1	97.1
IV 12000	97.0	97.4	97.4	97.5	97.6	97.7	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	98.0	98.0
IV 10000	97.6	97.9	98.1	98.2	98.2	98.3	98.4	98.4	98.4	98.5	98.5	98.5	98.6	98.6	98.6	98.6
IV 9000	97.7	98.0	98.1	98.2	98.3	98.4	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.7	98.7	98.7
IV 8000	97.9	98.2	98.4	98.5	98.6	98.7	98.8	98.8	98.8	98.9	98.9	98.9	99.0	99.0	99.0	99.0
IV 7000	98.1	98.4	98.6	98.7	98.7	98.8	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.2	99.2
IV 6000	98.4	98.8	99.0	99.0	99.1	99.2	99.3	99.3	99.3	99.5	99.5	99.5	99.5	99.5	99.6	99.6
IV 5000	98.6	98.9	99.1	99.2	99.2	99.3	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8
IV 4500	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 4000	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 3500	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 3000	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 2500	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 2000	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 1800	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 1500	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 1200	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 1000	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 900	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 800	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 700	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 600	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 500	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 400	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 300	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 200	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 100	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0
IV 0	98.7	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.7	99.8	99.8	99.8	99.8	100.0	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	91.0	91.3	91.3	91.4	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 18000	94.2	94.4	94.4	94.5	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
IV 16000	94.4	94.6	94.6	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
IV 14000	95.0	95.3	95.3	95.4	95.4	95.4	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
IV 12000	96.2	96.4	96.5	96.6	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
IV 10000	97.2	97.4	97.5	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV 9000	97.7	97.9	98.0	98.2	98.2	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
IV 8000	97.9	98.1	98.2	98.4	98.4	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 7000	98.3	98.6	98.7	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1
IV 6000	98.7	99.0	99.0	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5
IV 5000	99.0	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 4500	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 4000	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 3500	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 3000	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 2500	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 2000	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 1800	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 1500	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.1	99.5	99.5	99.7	99.7	99.7	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2385

1

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .25	≥ .2	≥ .15	≥ .1	≥ 0
NO CEILING ≥ 20000	70.1 73.2	70.3 73.4	70.4 73.5	70.4 73.5	70.4 73.5	70.4 73.5	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6	70.5 73.6
≥ 18000 IV 16000	78.7 79.9	79.0 80.1	79.0 80.2	79.0 80.2	79.0 80.2	79.1 80.3	79.2 80.3	79.2 80.3	79.2 80.3	79.2 80.4	79.2 80.4	79.2 80.4	79.2 80.4	79.2 80.4	79.2 80.4	79.2 80.4
≥ 14000 IV 12000	86.7 91.6	87.0 92.1	87.0 92.2	87.1 92.3	87.1 92.3	87.1 92.4	87.2 92.5	87.2 92.5	87.2 92.5	87.3 92.5	87.3 92.5	87.3 92.5	87.3 92.5	87.3 92.5	87.3 92.5	87.3 92.5
≥ 10000 IV 9000	94.2 95.0	94.8 95.5	94.8 95.6	94.9 95.7	95.0 95.8	95.0 95.8	95.1 95.9	95.1 95.9	95.1 95.9	95.2 96.0	95.2 96.0	95.2 96.0	95.2 96.0	95.2 96.0	95.2 96.0	95.2 96.0
≥ 8000 IV 7000	96.2 97.5	96.8 98.2	97.0 98.4	97.1 98.4	97.2 98.6	97.3 98.6	97.4 98.8	97.4 98.8	97.4 98.8	97.5 98.9	97.5 98.9	97.5 98.9	97.5 98.9	97.5 98.9	97.5 98.9	97.5 98.9
≥ 6000 IV 5000	97.9 98.0	98.7 99.1	98.9 99.2	98.9 99.3	99.1 99.5	99.2 99.5	99.3 99.7	99.4 99.7	99.4 99.7	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8
≥ 4500 IV 4000	98.0 99.0	99.1 99.2	99.2 99.3	99.3 99.4	99.5 99.6	99.5 99.6	99.7 99.8	99.7 99.8	99.7 99.8	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 100.0	99.8 100.0	99.8 100.0
≥ 3500 IV 3000	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 2500 IV 2000	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1800 IV 1500	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 1200 IV 1000	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 900 IV 800	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 700 IV 600	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 500 IV 400	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 300 IV 200	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 IV 0	98.0 98.0	99.2 99.2	99.3 99.3	99.4 99.4	99.6 99.6	99.6 99.6	99.8 99.8	99.8 99.8	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

2442

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1	≥ 1	≥ 1/2	≥ 1/2	≥ 1/4	≥ 1/4	≥ 1/8	≥ 0
NO CEILING ≥ 20000	70.2	70.4	70.4	70.4	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
≥ 16000 IV 16000	77.1	77.3	77.3	77.4	77.4	77.4	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
IV 14000 IV 12000	79.4	79.6	79.6	79.6	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
IV 10000 IV 9000	85.2	85.5	85.5	85.5	85.5	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
IV 8000 IV 7000	91.9	92.3	92.3	92.3	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.5	92.5
IV 6000 IV 5000	95.2	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.8	95.8	95.8
IV 4500 IV 4000	96.0	96.4	96.4	96.5	96.5	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
IV 3500 IV 3000	97.2	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	98.0	98.0
IV 2500 IV 2000	98.1	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.9	98.9
IV 1800 IV 1500	98.7	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6
IV 1200 IV 1000	98.8	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
IV 900 IV 800	98.8	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
IV 700 IV 600	99.0	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
IV 500 IV 400	99.0	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
IV 300 IV 200	99.0	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0
IV 100 IV 0	99.0	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2413

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS U.S.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING	66.9	67.4	67.5	67.3	67.5	67.5	67.5	67.3	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
≥ 20000	73.8	74.4	74.5	74.3	74.5	74.5	74.5	74.3	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
≥ 18000	74.7	75.2	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4
≥ 16000	76.8	77.4	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
≥ 14000	84.9	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
≥ 12000	92.6	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 10000	95.8	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 9000	96.7	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 8000	97.8	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 7000	98.2	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 6000	98.8	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 5000	99.0	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 4500	99.0	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.0	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.0	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	99.0	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	99.0	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.0	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.0	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS (EST)

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥0
NO CEILING ≥ 20000	73.9	74.2	74.3	74.3	74.3	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
≥ 18000	80.0	80.2	80.4	80.4	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 16000	83.2	83.6	83.7	83.7	83.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 14000	89.6	89.9	90.1	90.1	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 12000	95.2	95.5	95.7	95.7	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 10000	97.0	97.4	97.5	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 9000	97.7	98.1	98.2	98.2	98.3	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 8000	98.2	98.6	98.7	98.8	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 7000	98.5	98.9	99.0	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 6000	98.9	99.3	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 5000	99.2	99.6	99.7	99.8	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4500	99.2	99.6	99.7	99.8	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 4000	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3500	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 3000	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2484

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS -151

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5-16	≥ ¼	≥ 0
NO CEILING ≥ 20000	81.8	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
≥ 18000	86.9	87.2	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 16000	87.5	87.8	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 14000	89.2	89.5	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 12000	93.1	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 10000	97.0	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 9000	98.5	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 8000	98.5	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 7000	98.6	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 6000	98.8	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 5000	98.9	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4500	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.4	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.4	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.4	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.4	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.5	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2493

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 5/16	≥ 0
NO CEILING	82.2	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 20000	90.5	90.7	90.7	90.7	90.7	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 18000	90.9	91.1	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 16000	91.8	91.9	92.0	92.0	92.0	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
≥ 14000	94.7	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 12000	97.8	98.0	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.3	98.3	98.3
≥ 10000	98.5	98.6	98.7	98.8	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 9000	98.6	98.7	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1
≥ 8000	98.7	98.9	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 7000	99.0	99.2	99.3	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.7
≥ 6000	99.1	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 5000	99.2	99.4	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4500	99.2	99.4	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 4000	99.2	99.4	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	99.2	99.4	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.2	99.4	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 2000	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 1800	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 1500	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 1200	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 1000	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 900	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 800	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 700	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 600	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 500	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 400	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 300	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 200	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 100	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9
≥ 0	99.3	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS 2494



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS (LST)

CEILING FEET.	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1'	≥ 0
NO CEILING	66.5	66.6	66.6	66.6	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.8
≥ 20000	80.1	80.2	80.2	80.4	80.5	80.5	80.6	80.6	80.6	80.6	80.7	80.7	80.7	80.7	80.7	80.7
≥ 18000	80.6	80.8	80.8	81.0	81.0	81.0	81.1	81.1	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.2
≥ 16000	82.4	82.6	82.6	82.8	82.8	82.9	83.0	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1
≥ 14000	87.1	87.2	87.3	87.5	87.6	87.6	87.7	87.7	87.7	87.8	87.9	87.9	87.9	87.9	87.9	87.9
≥ 12000	91.0	91.2	91.2	91.4	91.5	91.6	91.7	91.7	91.7	91.8	91.9	91.9	91.9	91.9	91.9	92.0
≥ 10000	92.9	93.1	93.3	93.5	93.6	93.6	93.7	93.7	93.8	93.9	94.0	94.0	94.0	94.0	94.0	94.1
≥ 9000	93.7	94.0	94.1	94.3	94.5	94.5	94.7	94.7	94.7	94.9	94.9	94.9	94.9	94.9	95.0	95.1
≥ 8000	95.1	95.6	95.8	96.0	96.2	96.2	96.4	96.5	96.5	96.7	96.7	96.7	96.9	96.9	96.9	97.0
≥ 7000	96.2	96.7	96.9	97.1	97.4	97.4	97.7	97.7	97.8	98.0	98.0	98.0	98.2	98.2	98.2	98.4
≥ 6000	96.5	97.1	97.3	97.5	97.8	97.8	98.0	98.1	98.1	98.4	98.4	98.4	98.6	98.6	98.6	98.8
≥ 5000	96.9	97.5	97.8	98.0	98.2	98.2	98.5	98.6	98.6	98.9	98.9	98.9	99.1	99.1	99.2	99.3
≥ 4500	97.0	97.6	97.9	98.1	98.3	98.4	98.6	98.7	98.7	99.0	99.1	99.1	99.2	99.2	99.3	99.5
≥ 4000	97.1	97.7	98.0	98.2	98.4	98.4	98.7	98.8	98.8	99.1	99.2	99.2	99.3	99.3	99.4	99.6
≥ 3500	97.1	97.7	98.0	98.2	98.4	98.4	98.7	98.8	98.8	99.1	99.2	99.2	99.3	99.3	99.4	99.6
≥ 3000	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 2500	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 2000	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 1800	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 1500	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 1200	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 1000	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 900	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 800	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 700	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 600	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 500	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 400	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 300	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 200	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 100	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.5	99.7
≥ 0	97.1	97.8	98.0	98.2	98.4	98.5	98.7	98.8	98.8	99.2	99.2	99.2	99.4	99.4	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS 2489

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5-16	≥¼	≥0
NO CEILING ≥ 20000	67.2	67.8	67.9	68.0	68.0	68.0	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
≥ 18000 IV 16000	76.4	77.1	77.3	77.4	77.4	77.5	77.6	77.6	77.6	77.7	77.7	77.7	77.7	77.7	77.7	77.7
IV 14000 IV 12000	76.9	77.6	77.8	78.0	78.0	78.0	78.1	78.1	78.1	78.2	78.2	78.2	78.2	78.2	78.2	78.2
IV 10000 IV 9000	78.2	79.0	79.2	79.3	79.3	79.4	79.5	79.5	79.5	79.6	79.6	79.6	79.6	79.6	79.6	79.6
IV 8000 IV 7000	84.4	85.3	85.5	85.7	85.8	85.9	85.9	85.9	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0
IV 6000 IV 5000	89.0	90.1	90.3	90.4	90.7	90.7	90.8	90.8	90.8	90.9	90.9	90.9	90.9	90.9	90.9	91.0
IV 4500 IV 4000	91.7	92.9	93.1	93.4	93.5	93.6	93.7	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.9
IV 3500 IV 3000	92.5	93.8	94.1	94.3	94.5	94.6	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.9
IV 2500 IV 2000	94.1	95.6	95.8	96.1	96.3	96.4	96.5	96.5	96.5	96.6	96.7	96.7	96.7	96.7	96.7	96.7
IV 1800 IV 1500	95.5	97.1	97.5	97.8	98.0	98.1	98.2	98.2	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.5
IV 1200 IV 1000	96.1	97.7	98.1	98.4	98.7	98.8	98.9	98.9	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.2
IV 900 IV 800	96.3	98.0	98.4	98.7	99.0	99.1	99.2	99.2	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.5
IV 700 IV 600	96.4	98.2	98.5	98.9	99.2	99.3	99.4	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.7
IV 500 IV 400	96.4	98.2	98.6	98.9	99.3	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.7	99.8
IV 300 IV 200	96.4	98.2	98.6	98.9	99.3	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.7	99.8
IV 100 IV 0	96.4	98.2	98.6	98.9	99.3	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.7	99.8

TOTAL NUMBER OF OBSERVATIONS 2496

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS UT-5

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	69.8	70.0	70.1	70.1	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
≥ 20000	77.8	78.0	78.2	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
≥ 18000	78.0	78.3	78.5	78.5	78.5	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
≥ 16000	79.5	79.8	80.1	80.1	80.1	80.1	80.1	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
≥ 14000	85.4	85.7	86.0	86.0	86.1	86.1	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
≥ 12000	90.0	90.3	90.6	90.6	90.8	90.8	90.8	90.8	90.8	90.8	90.9	90.9	90.9	90.9	90.9	90.9
≥ 10000	92.4	92.8	93.1	93.1	93.2	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 9000	93.7	94.2	94.6	94.7	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 8000	95.2	95.9	96.3	96.4	96.5	96.5	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 7000	96.2	97.1	97.4	97.5	97.6	97.6	97.7	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 6000	97.0	98.2	98.6	98.7	98.8	98.8	98.9	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 5000	97.1	98.3	98.9	99.0	99.1	99.1	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4500	97.2	98.4	99.0	99.1	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	97.3	98.5	99.2	99.3	99.5	99.5	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3500	97.3	98.6	99.3	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	97.3	98.6	99.3	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	97.3	98.6	99.3	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	97.3	98.6	99.3	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	97.3	98.6	99.3	99.4	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS 11.51

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	72.3	72.3	72.4	72.4	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
≥ 20000	78.6	78.6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 18000	78.9	78.9	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.2	79.2	79.2	79.2	79.2	79.2	79.2
IV 16000	80.6	80.8	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.1
IV 14000	86.7	86.8	86.9	86.9	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1
IV 12000	92.5	92.6	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 10000	95.0	95.1	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
IV 9000	96.1	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7
IV 8000	97.2	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9
IV 7000	97.8	98.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6
IV 6000	98.3	98.9	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 5000	98.5	99.1	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7
IV 4500	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 4000	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 3500	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 3000	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 2500	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 2000	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 1800	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 1500	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 1200	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 1000	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 900	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 800	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 700	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 600	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 500	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 400	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 300	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 200	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 100	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 0	98.6	99.2	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-71  
YEARS

AUG  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	67.8	68.1	68.1	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
≥ 20000	74.4	74.7	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
≥ 18000	75.6	75.9	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 16000	77.8	78.1	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
≥ 14000	85.8	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 12000	91.7	92.2	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 10000	94.9	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 9000	95.7	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 8000	96.9	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 7000	97.4	97.9	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 6000	98.0	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 5000	98.6	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4500	98.6	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4000	98.8	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	98.8	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	98.8	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 2500	98.9	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	98.9	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.9	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.9	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 STATION LUKE AFB ARIZONA/PHOENIX

42-46.51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS -151

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING ≥ 20000	74.7 80.3	75.2 80.8	75.2 80.8	73.2 80.8	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9	75.3 80.9
IVN 18000	81.3 84.1	81.7 84.5	81.7 84.5	81.8 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6	81.9 84.6
IVN 16000	89.7 94.0	90.1 94.5	90.1 94.5	90.2 94.5	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6	90.3 94.6
IVN 14000	95.8 96.2	96.3 96.6	96.3 96.6	96.3 96.7	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8
IVN 12000	96.8 96.9	97.3 97.5	97.3 97.5	97.3 97.5	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6
IVN 10000	97.8 98.2	98.3 98.9	98.3 98.9	98.4 98.9	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0	98.5 99.0
IVN 9000	98.3 98.5	98.9 99.2	98.9 99.2	99.0 99.2	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3	99.0 99.3
IVN 8000	98.5 98.6	99.2 99.3	99.2 99.3	99.2 99.3	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5
IVN 7000	98.6 98.6	99.4 99.4	99.4 99.4	99.5 99.5	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6
IVN 6000	98.6 98.6	99.4 99.4	99.4 99.4	99.5 99.5	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6
IVN 5000	98.8 98.8	99.5 99.6	99.5 99.6	99.6 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 4500	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 4000	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 3500	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 3000	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 2500	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 2000	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 1800	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 1500	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 1200	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 1000	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 900	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 800	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 700	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 600	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 500	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 400	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 300	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 200	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 100	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IVN 0	98.8 98.8	99.6 99.6	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS U.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
≥ 18000	88.0	88.0	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 16000	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 14000	93.8	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 12000	95.9	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 10000	96.9	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 9000	97.1	97.2	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 8000	97.4	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 7000	97.9	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 6000	98.4	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 5000	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 4500	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 4000	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 3500	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3000	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2416

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS - LT

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 20000	89.2	89.3	89.4	89.4	89.4	89.4	89.4	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.7
≥ 18000	90.0	90.1	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.5
≥ 16000	91.4	91.5	91.6	91.6	91.6	91.6	91.6	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.9
≥ 14000	93.8	93.9	94.0	94.0	94.0	94.0	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.3	94.4
≥ 12000	95.5	95.7	95.8	95.8	95.8	95.8	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.1	96.2
≥ 10000	96.4	96.5	96.7	96.7	96.8	96.8	96.8	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.1	97.1
≥ 9000	96.5	96.7	96.9	96.9	97.0	97.0	97.0	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.3	97.3
≥ 8000	97.1	97.4	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.9	97.9	97.9	97.9	97.9	98.0	98.0
≥ 7000	97.5	97.8	98.0	98.1	98.1	98.1	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.4	98.5
≥ 6000	97.8	98.1	98.4	98.4	98.5	98.5	98.5	98.6	98.6	98.7	98.7	98.7	98.8	98.8	98.9	99.0
≥ 5000	98.1	98.5	98.8	98.8	98.8	98.8	98.9	98.9	98.9	99.1	99.1	99.1	99.2	99.2	99.3	99.4
≥ 4500	98.1	98.5	98.8	98.8	98.8	98.8	98.9	98.9	98.9	99.1	99.1	99.1	99.2	99.2	99.3	99.4
≥ 4000	98.3	98.7	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.3	99.3	99.3	99.4	99.4	99.5	99.6
≥ 3500	98.4	98.8	99.0	99.0	99.1	99.1	99.1	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.5	99.6
≥ 3000	98.5	98.8	99.1	99.1	99.2	99.2	99.2	99.3	99.3	99.5	99.5	99.5	99.5	99.5	99.6	99.7
≥ 2500	98.5	98.8	99.1	99.1	99.2	99.2	99.2	99.3	99.3	99.5	99.5	99.5	99.5	99.5	99.6	99.7
≥ 2000	98.6	98.9	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.5	99.5	99.5	99.6	99.6	99.7	99.8
≥ 1800	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 1500	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 1200	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 1000	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 900	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 800	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 700	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 600	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 500	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 400	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 300	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 200	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 100	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8
≥ 0	98.6	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

3416



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	64.9	65.1	65.1	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 20000	80.7	81.1	81.2	81.3	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
IV 18000	81.5	81.9	82.0	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
IV 16000	83.0	83.4	83.5	83.6	83.7	83.7	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
IV 14000	86.8	87.2	87.3	87.4	87.5	87.5	87.6	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
IV 12000	90.1	90.5	90.7	90.8	91.0	91.0	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.3
IV 10000	91.8	92.2	92.4	92.5	92.7	92.7	92.8	92.8	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0
IV 9000	92.3	92.8	93.0	93.0	93.3	93.3	93.3	93.3	93.4	93.4	93.5	93.5	93.5	93.5	93.5	93.5
IV 8000	94.2	94.7	95.0	95.0	95.2	95.2	95.3	95.3	95.4	95.4	95.5	95.5	95.6	95.6	95.6	95.6
IV 7000	95.2	95.8	96.1	96.2	96.4	96.4	96.6	96.6	96.6	96.7	96.9	96.9	96.9	96.9	96.9	97.0
IV 6000	96.4	97.3	97.7	97.8	98.1	98.1	98.3	98.3	98.4	98.6	98.7	98.7	98.8	98.8	98.9	99.0
IV 5000	96.7	97.6	98.1	98.1	98.3	98.3	98.5	98.5	98.8	98.8	99.0	99.1	99.1	99.2	99.3	99.4
IV 4500	96.8	97.7	98.1	98.2	98.6	98.6	98.8	98.8	98.9	99.0	99.2	99.2	99.3	99.3	99.4	99.5
IV 4000	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 3500	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 3000	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 2500	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 2000	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 1800	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 1500	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 1200	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 1000	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 900	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 800	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 700	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 600	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.0	99.2	99.3	99.3	99.4	99.4	99.5	99.6
IV 500	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.3	99.5	99.5	99.6	99.6	99.7	99.8
IV 400	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.3	99.5	99.5	99.6	99.6	99.7	99.8
IV 300	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.3	99.5	99.5	99.6	99.6	99.7	99.8
IV 200	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.3	99.5	99.5	99.6	99.6	99.7	99.8
IV 100	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.4	99.5	99.5	99.6	99.6	99.8	99.9
IV 0	96.8	97.8	98.3	98.3	98.7	98.7	99.0	99.0	99.1	99.4	99.5	99.5	99.6	99.6	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

2416

1

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ 1/20	≥ 0
NO CEILING	68.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 20000	77.7	78.2	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6
≥ 18000	78.0	78.5	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 16000	78.7	79.2	79.5	79.5	79.5	79.5	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
≥ 14000	84.0	84.6	84.9	84.9	85.0	85.0	85.1	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 12000	88.0	88.7	89.0	89.1	89.2	89.2	89.2	89.2	89.2	89.4	89.4	89.4	89.4	89.5	89.5	89.5
≥ 10000	90.4	91.1	91.4	91.5	91.6	91.6	91.7	91.7	91.7	91.9	91.9	91.9	92.0	92.0	92.0	92.0
≥ 9000	91.6	92.5	92.8	92.8	93.0	93.0	93.0	93.0	93.0	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 8000	93.5	94.5	94.8	95.0	95.1	95.2	95.2	95.3	95.3	95.6	95.6	95.6	95.7	95.7	95.7	95.7
≥ 7000	94.7	95.9	96.3	96.6	96.7	96.8	96.9	96.9	96.9	97.3	97.3	97.3	97.3	97.4	97.4	97.4
≥ 6000	95.9	97.4	97.8	98.1	98.3	98.3	98.5	98.6	98.6	98.9	98.9	98.9	98.9	98.9	99.0	99.0
≥ 5000	96.0	97.7	98.1	98.4	98.6	98.7	98.8	98.9	98.9	99.3	99.3	99.3	99.3	99.3	99.4	99.4
≥ 4500	96.1	97.8	98.2	98.5	98.7	98.8	98.9	99.0	99.0	99.3	99.3	99.3	99.3	99.4	99.5	99.5
≥ 4000	96.2	97.9	98.3	98.6	98.8	98.9	99.1	99.2	99.2	99.5	99.5	99.5	99.5	99.6	99.7	99.7
≥ 3500	96.2	97.9	98.3	98.6	98.8	98.9	99.1	99.2	99.2	99.5	99.5	99.5	99.5	99.6	99.7	99.7
≥ 3000	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 2500	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 2000	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1800	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1500	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1200	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1000	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 900	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 800	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 700	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 600	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 500	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 400	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 300	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 200	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 100	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 0	96.2	97.9	98.3	98.6	98.8	98.9	99.3	99.3	99.3	99.7	99.7	99.7	99.7	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2416

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS 11-51

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	88.8	88.8	88.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 20000	90.9	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 18000	91.1	91.2	91.2	91.2	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 16000	91.3	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 14000	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 12000	95.7	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 10000	95.9	97.0	97.0	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 9000	97.3	97.4	97.4	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 8000	98.0	98.2	98.2	98.2	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 7000	98.5	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 6000	99.0	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 5000	99.2	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 4500	99.2	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 4000	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3500	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3000	99.4	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.4	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.4	99.7	99.7	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2338

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/WAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY STATUTE MILES.														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .4	≥ .3	≥ .25	≥ .2	≥ 0
NO CEILING	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 20000	90.5	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 18000	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 16000	91.5	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 14000	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 12000	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 10000	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 9000	97.3	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 8000	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 7000	98.2	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 6000	98.8	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 5000	99.1	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4500	99.1	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	99.2	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3500	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.4	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2334

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

STATION: 22111 LUKE AFB ARIZONA/PHOENIX STATION NAME: 42-46,51-71 YEARS: SEP MONTH: 0600-0800

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING	85.2	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
≥ 20000	86.9	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 18000	87.2	87.3	87.3	87.3	87.3	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 16000	88.1	88.1	88.2	88.2	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
≥ 14000	90.9	91.0	91.0	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 12000	93.7	93.8	93.8	93.8	93.8	93.8	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 10000	95.3	95.5	95.6	95.6	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 9000	95.9	96.1	96.1	96.1	96.2	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 8000	96.7	96.9	96.9	96.9	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 7000	97.3	97.5	97.5	97.5	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 6000	98.2	98.4	98.4	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 5000	98.8	99.0	99.0	99.0	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 4500	98.9	99.1	99.2	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4000	99.1	99.4	99.4	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.1	99.4	99.4	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	99.1	99.4	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2500	99.1	99.4	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.1	99.4	99.6	99.6	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.1	99.4	99.6	99.6	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.1	99.4	99.6	99.6	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.1	99.4	99.6	99.6	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.1	99.4	99.6	99.6	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2337

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 L. J. KE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 20000	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 18000	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 16000	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 14000	91.3	91.4	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 12000	94.3	94.4	94.4	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 10000	95.7	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 9000	96.3	96.4	96.4	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 8000	96.9	97.1	97.1	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 7000	97.6	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 6000	98.4	98.6	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 5000	98.6	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 4500	98.8	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4000	99.2	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.2	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	99.2	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500	99.3	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2000	99.4	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	99.4	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.5	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.5	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.5	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.5	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2336

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/HAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS (EST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5.16	≥ ¼	≥ 0
NO CEILING	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 20000	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 18000	89.9	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 16000	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 14000	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 12000	93.7	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 10000	95.5	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 9000	95.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 8000	96.7	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 7000	97.0	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 6000	98.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 5000	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 4500	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 4000	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 3500	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 3000	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500	99.4	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.6	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2335

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/32	≥ 0
NO CEILING ≥ 20000	85.3	85.4	85.4	85.4	85.4	85.4	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5
≥ 18000	89.6	89.7	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 16000	90.3	90.4	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 14000	91.7	91.9	92.0	92.0	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
≥ 12000	93.3	93.5	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 10000	94.8	94.9	95.1	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 9000	95.2	95.3	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6
≥ 8000	95.9	96.0	96.2	96.2	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 7000	96.7	96.8	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 6000	98.3	98.5	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 5000	98.7	98.8	99.1	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 4500	98.8	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4000	99.0	99.1	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.0	99.2	99.4	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	99.2	99.4	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.2	99.4	99.6	99.7	99.7	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2000	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.2	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2336



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS (EST)

CEILING FEET	VISIBILITY (STATUTE MILES)														
	≥10	≥6	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≤¼	≤0
NO CEILING ≥ 20000	84.5	84.5	84.5	84.5	84.6	84.6	84.6	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 18000	89.1	89.2	89.2	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 16000	89.5	89.6	89.6	89.7	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.9	89.9
≥ 14000	90.1	90.1	90.1	90.2	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.4	90.4
≥ 12000	91.6	91.9	92.0	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.3	92.3
≥ 10000	93.8	94.0	94.0	94.2	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 8000	94.9	95.1	95.2	95.3	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.6	95.6	95.6
≥ 6000	95.4	95.5	95.6	95.8	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.1	96.1	96.1
≥ 4000	96.4	96.6	96.7	96.8	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 2000	97.2	97.4	97.4	97.6	97.7	97.7	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 1000	98.1	98.5	98.5	98.7	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1
≥ 500	98.4	98.7	98.8	99.0	99.1	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	98.4	98.8	98.8	99.0	99.2	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5
≥ 200	98.5	98.8	98.9	99.1	99.3	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.6
≥ 100	98.5	98.8	98.9	99.1	99.3	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.6
≥ 0	98.5	99.0	99.1	99.3	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1600	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1400	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1200	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 1000	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 900	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 800	98.7	99.1	99.1	99.3	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 700	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 600	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 500	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9
≥ 400	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9
≥ 300	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9
≥ 200	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.9	100.0	100.0	100.0
≥ 100	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.9	100.0	100.0	100.0
≥ 0	98.7	99.1	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.8	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 2335

1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

STATION 23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS UT-5

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	86.4	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 20000	89.2	89.4	89.4	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
IV 18000	89.4	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
IV 16000	89.8	90.0	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
IV 14000	91.2	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
IV 12000	94.4	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
IV 10000	95.4	95.7	95.8	95.9	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
IV 9000	96.1	96.4	96.5	96.5	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
IV 8000	97.2	97.4	97.6	97.6	97.7	97.7	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
IV 7000	97.6	97.8	97.9	98.0	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
IV 6000	98.2	98.5	98.7	98.8	98.9	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 5000	98.6	98.9	99.1	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 4500	98.7	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 4000	98.8	99.1	99.3	99.4	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 3500	98.8	99.1	99.4	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 3000	98.8	99.1	99.4	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 2500	98.8	99.1	99.4	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 2000	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1800	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1500	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1200	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 1000	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 900	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 800	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 700	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 600	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 500	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	99.0	99.4	99.6	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2338

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

GCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING ≥ 20000	88.5	88.5	88.5	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 18000	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 16000	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 14000	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 12000	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 10000	95.1	95.1	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 9000	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 8000	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 7000	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 6000	97.5	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 5000	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 4500	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	99.3	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3500	99.5	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.5	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2415

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

DCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS (EST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5-16	≥ 1	≥ 0
NO CEILING	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 20000	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 18000	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 16000	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 14000	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 12000	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 10000	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 9000	96.1	96.3	96.3	96.3	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 8000	96.4	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 7000	96.7	97.1	97.1	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 6000	97.9	98.5	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 5000	98.6	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4500	98.8	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 4000	99.0	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3500	99.0	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 3000	99.0	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	99.0	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2000	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.1	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2413

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

OCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
GROUP 1131

CEILING 'FEET'	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2 1/2	≥2	≥1 1/2	≥1 1/4	≥1	≥ 3/4	≥ 1/2	≥ 1/3	≥ 1/4	≥ 1/5	≥0
NO CEILING	81.9	82.0	82.0	82.0	82.0	82.0	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1
≥ 20000	86.7	86.7	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.9	86.9	86.9	86.9	86.9	86.9	86.9
≥ 18000	86.9	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 16000	87.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	88.0	88.0	88.0	88.0	88.0	88.0	88.0
≥ 14000	90.1	90.1	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 12000	92.1	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 10000	93.9	94.0	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 9000	94.3	94.5	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 8000	95.2	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 7000	95.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 6000	97.5	97.9	97.9	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 5000	98.3	98.8	98.8	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4500	98.4	98.9	98.9	99.1	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 4000	98.7	99.3	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	98.8	99.3	99.3	99.5	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 3000	98.8	99.4	99.4	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500	98.8	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 2000	98.9	99.5	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.9	99.5	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.9	99.5	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	99.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.9	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

2414

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

92-46,51-71

03T

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 5 16	≥ .	≥ 0
NO CEILING	80.6	81.1	81.2	81.3	81.4	81.4	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6
≥ 20000	87.0	87.3	87.6	87.7	87.8	87.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 18000	87.4	87.9	88.0	88.1	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
≥ 16000	88.1	88.6	88.7	88.8	88.9	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 14000	90.2	90.7	90.8	90.9	91.0	91.0	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 12000	91.8	92.3	92.4	92.5	92.6	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 10000	93.3	93.8	93.9	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 9000	93.8	94.3	94.4	94.5	94.6	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 8000	95.1	95.6	95.7	95.8	95.9	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 7000	95.7	96.4	96.4	96.6	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 6000	96.8	97.4	97.5	97.6	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 5000	97.5	98.2	98.3	98.5	98.6	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 4500	97.5	98.2	98.4	98.5	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 4000	97.9	98.7	98.8	99.0	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 3500	97.9	98.7	98.8	99.0	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 3000	98.1	98.8	99.0	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 2500	98.1	98.9	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 2000	98.3	99.0	99.2	99.3	99.5	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.3	99.1	99.3	99.4	99.5	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	98.3	99.1	99.3	99.4	99.5	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	98.3	99.1	99.3	99.5	99.6	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.3	99.1	99.3	99.5	99.6	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2412

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

007

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING, FEET	VISIBILITY (STATUTE) MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING ≥ 20000	81.7 88.9	82.1 89.4	82.2 89.5	82.2 89.6	82.2 89.6	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8	82.3 89.8
≥ 18000 IV 16000	89.9 90.8	90.4 91.3	90.5 91.4	90.6 91.5	90.6 91.5	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7	90.8 91.7
IV 14000 IV 12000	91.9 92.2	92.5 93.9	92.6 93.9	92.7 94.0	92.7 94.1	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2	92.8 94.2
IV 10000 IV 9000	93.9 94.1	94.5 94.7	94.6 94.8	94.7 94.9	94.7 94.9	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1	94.9 95.1
≥ 8000 IV 7000	95.4 95.8	96.1 96.5	96.1 96.6	96.2 96.6	96.3 96.7	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8	96.4 96.8
IV 6000 IV 5000	97.0 97.8	97.7 98.5	97.8 98.6	97.9 98.7	97.9 98.8	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9	98.1 98.9
IV 4500 IV 4000	98.0 98.3	98.7 99.0	98.8 99.2	98.9 99.3	99.0 99.3	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4	99.1 99.4
IV 3500 IV 3000	98.3 98.4	99.0 99.2	99.2 99.3	99.3 99.4	99.3 99.4	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5
IV 2500 IV 2000	98.4 98.5	99.2 99.2	99.3 99.3	99.4 99.4	99.4 99.5	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6
IV 1800 IV 1500	98.6 98.6	99.4 99.4	99.5 99.5	99.6 99.6	99.6 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IV 1200 IV 1000	98.6 98.8	99.4 99.5	99.5 99.7	99.6 99.8	99.7 99.8	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0
IV 900 IV 800	98.8 98.8	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 700 IV 600	98.8 98.8	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 500 IV 400	98.8 98.8	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 300 IV 200	98.8 98.8	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 100 IV 0	98.8 98.8	99.5 99.5	99.7 99.7	99.8 99.8	99.8 99.8	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

2411

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

28111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

GCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700  
HOURS L.S.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2	≥2	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1
NO CEILING ≥ 20000	61.2 90.0	81.4 90.2	81.5 90.3	81.5 90.4	81.5 90.4	81.6 90.4	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5	81.6 90.5
≥ 18000 IV 16000	90.6 91.0	90.8 91.3	90.9 91.4	91.0 91.5	91.0 91.5	91.0 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5	91.1 91.5
≥ 14000 IV 12000	92.6 94.0	92.9 94.4	93.0 94.5	93.1 94.6	93.1 94.6	93.1 94.6	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7	93.2 94.7
≥ 10000 IV 9000	95.0 95.4	95.4 95.7	95.4 95.8	95.5 95.9	95.6 95.9	95.6 95.9	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0	95.6 96.0
≥ 8000 IV 7000	96.2 96.8	96.6 97.2	96.7 97.3	96.8 97.3	96.8 97.4	96.8 97.4	96.9 97.4	96.9 97.4	96.9 97.4	96.9 97.4	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5
≥ 6000 IV 5000	97.6 98.2	98.1 98.7	98.2 98.8	98.3 98.9	98.3 98.9	98.3 98.9	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0
≥ 4500 IV 4050	98.3 98.7	99.0 99.2	99.0 99.3	99.2 99.4	99.2 99.5	99.2 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5	99.3 99.5
≥ 3500 IV 3000	98.7 98.8	99.2 99.3	99.3 99.4	99.4 99.5	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.7	99.5 99.7	99.5 99.7	99.5 99.7	99.5 99.7	99.5 99.7
≥ 500 IV 2000	98.8 98.9	99.3 99.5	99.4 99.5	99.5 99.7	99.6 99.7	99.6 99.7	99.6 99.8	99.6 99.8	99.6 99.8	99.6 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8
≥ 1800 IV 1500	99.0 99.0	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.9	99.8 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 1200 IV 1000	99.0 99.1	99.6 99.7	99.7 99.8	99.8 99.9	99.9 99.9	99.9 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 900 IV 800	99.1 99.1	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 700 IV 600	99.1 99.1	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 500 IV 400	99.1 99.1	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 300 IV 200	99.1 99.1	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 IV 0	99.1 99.1	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

2414



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

43-46, 51-71

OCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS 1151

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.1	≥0
NO CEILING ≥ 20000	83.4	83.5	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 18000 ≥ 16000	90.6	90.8	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 14000 ≥ 12000	92.4	92.6	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 10000 ≥ 9000	95.0	95.2	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 8000 ≥ 7000	96.3	96.6	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 6000 ≥ 5000	97.7	98.1	98.3	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 4500 ≥ 4000	98.6	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 3500 ≥ 3000	98.9	99.3	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2500 ≥ 2000	99.1	99.5	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800 ≥ 1500	99.1	99.5	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200 ≥ 1000	99.1	99.5	99.7	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900 ≥ 800	99.2	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700 ≥ 600	99.2	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500 ≥ 400	99.2	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300 ≥ 200	99.2	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100 ≥ 0	99.2	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2413

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

GCT

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING, FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.1	≥0.05	≥0.025	≥0.01	≥0
NO CEILING	88.2	86.4	88.4	88.4	88.4	88.4	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 20000	91.6	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 18000	92.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 16000	92.6	92.8	92.8	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 14000	93.6	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 12000	95.9	96.1	96.1	96.1	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 10000	96.6	96.8	96.8	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 9000	96.8	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 8000	97.4	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 7000	97.7	98.0	98.0	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 6000	98.3	98.7	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 5000	98.6	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 4500	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 4000	99.0	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	99.2	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 3000	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2500	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 2000	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1800	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1500	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2417

DATA PROCESSING FACILITY  
USAF ETAC  
AIR WEATHER SERVICE/HAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

42-41, 92-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0000-0200

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 1/32	≥ 0
NO CEILING	84.4	84.8	84.8	84.8	84.8	84.8	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
≥ 2000	88.4	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 1800	89.1	89.5	89.5	89.5	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 1600	89.6	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 1400	91.3	91.9	91.9	92.0	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1
≥ 1200	93.2	93.8	93.8	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1000	94.1	94.9	94.9	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 900	94.3	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 800	95.3	96.2	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 700	95.8	96.8	96.9	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 600	96.2	97.3	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 500	97.3	98.5	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 450	97.3	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	97.6	99.0	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 350	97.6	99.0	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	97.9	99.2	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 250	98.1	99.4	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.1	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

2293

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0200-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING	83.7	84.2	84.3	84.3	84.3	84.3	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
≥ 20000	88.4	88.9	89.0	89.0	89.0	89.0	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 18000	88.0	89.4	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 16000	89.6	90.1	90.3	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 14000	90.6	91.3	91.4	91.4	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 12000	92.6	93.3	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 10000	93.7	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 9000	94.3	95.2	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 8000	95.0	95.9	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 7000	95.6	96.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 6000	96.4	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 5000	97.5	98.6	98.7	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 4500	97.6	98.8	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4000	98.0	99.2	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3500	98.0	99.2	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 3000	98.2	99.4	99.6	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2500	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 2000	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1800	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1500	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1200	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 1000	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.2	99.5	99.6	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

2292

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

NOV  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS TEST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING	78.6	79.2	79.2	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 20000	84.8	85.5	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.8
≥ 18000	85.7	86.4	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 16000	86.4	87.0	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3
≥ 14000	87.8	88.4	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 12000	90.4	91.0	91.2	91.3	91.3	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 10000	92.1	92.8	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 9000	92.6	93.4	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 8000	93.2	94.0	94.2	94.2	94.3	94.3	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 7000	94.3	95.2	95.3	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 6000	95.6	96.6	96.8	96.9	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 5000	96.8	97.7	97.9	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
4500	97.1	98.0	98.3	98.3	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
4000	97.5	98.4	98.7	98.7	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
3500	97.6	98.6	98.9	98.9	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
3000	97.9	98.9	99.2	99.2	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
2500	98.1	99.1	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
2000	98.2	99.3	99.6	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
1800	98.2	99.3	99.6	99.6	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1500	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1200	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1000	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
900	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
800	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
700	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
600	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
500	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	98.2	99.3	99.6	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2290

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

NDV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	75.3 83.5	76.2 84.3	75.2 84.4	76.2 84.4	75.3 84.4	76.3 84.4	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6	76.4 84.6
IV 18000 IV 16000	84.7 85.6	85.6 86.5	85.6 86.5	85.6 86.5	85.7 86.6	85.7 86.6	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7	85.9 86.7
IV 14000 IV 12000	87.4 89.2	88.4 90.2	88.4 90.2	88.5 90.3	88.5 90.4	88.5 90.4	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6	88.7 90.6
IV 10000 IV 9000	91.1 91.5	92.2 92.7	92.3 92.7	92.3 92.8	92.4 92.8	92.4 92.8	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1	92.6 93.1
IV 8000 IV 7000	92.5 93.4	93.7 94.3	93.8 94.6	93.8 94.7	93.9 94.8	93.9 94.8	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0	94.1 95.0
IV 6000 IV 5000	94.3 95.2	95.5 96.4	95.6 96.5	95.6 96.6	95.8 96.7	95.8 96.8	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0	96.0 97.0
IV 4500 IV 4000	95.5 96.0	96.8 97.3	96.9 97.4	97.0 97.5	97.1 97.6	97.2 97.7	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9	97.4 97.9
IV 3500 IV 3000	96.1 96.6	97.3 98.1	97.6 98.2	97.7 98.4	97.8 98.5	97.9 98.6	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8
IV 2500 IV 2000	97.0 97.2	98.5 98.8	98.7 99.0	98.9 99.3	99.0 99.5	99.0 99.5	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8	99.3 99.8
IV 1800 IV 1500	97.2 97.2	98.8 98.8	99.0 99.0	99.3 99.3	99.5 99.5	99.5 99.5	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IV 1200 IV 1000	97.2 97.2	98.8 98.8	99.0 99.1	99.3 99.3	99.5 99.6	99.6 99.6	99.8 99.9	99.8 99.9	99.8 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
IV 900 IV 800	97.2 97.2	98.9 98.9	99.1 99.1	99.4 99.4	99.6 99.6	99.7 99.7	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 700 IV 600	97.2 97.2	98.9 98.9	99.1 99.1	99.4 99.4	99.6 99.6	99.7 99.7	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 500 IV 400	97.3 97.3	98.9 98.9	99.2 99.2	99.4 99.4	99.7 99.7	99.7 99.7	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 300 IV 200	97.3 97.3	98.9 98.9	99.2 99.2	99.4 99.4	99.7 99.7	99.7 99.7	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
IV 100 IV 0	97.3 97.3	98.9 98.9	99.2 99.2	99.4 99.4	99.7 99.7	99.7 99.7	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

2292

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

STATION: 22111 LUKE AFB ARIZONA/PHOENIX

STATION NAME: 42-46, 51-71

NGV  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400  
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	75.7 84.0	76.3 84.6	76.3 84.7	76.4 84.7	76.4 84.9	76.5 85.0	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1	76.5 85.1
≥ 18000	85.2	85.9	86.1	86.1	86.3	86.4	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 16000	86.3	86.9	87.2	87.2	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 14000	88.2	88.9	89.1	89.2	89.3	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 12000	89.2	89.9	90.2	90.2	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 10000	91.4	92.2	92.4	92.5	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 9000	91.8	92.6	92.8	92.9	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 8000	92.7	93.6	93.8	93.9	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 7000	93.5	94.3	94.5	94.6	94.8	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 6000	94.8	95.7	95.9	96.0	96.2	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 5000	95.8	96.7	97.0	97.1	97.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 4500	96.2	97.1	97.4	97.5	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 4000	96.7	97.6	97.9	98.0	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 3500	96.8	97.7	98.0	98.1	98.3	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 3000	97.2	98.1	98.5	98.6	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 2500	97.2	98.2	98.6	98.6	98.9	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 2000	97.4	98.6	98.9	99.0	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	97.5	98.6	99.0	99.0	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1500	97.5	98.6	99.0	99.1	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	97.5	98.6	99.0	99.1	99.5	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	97.6	98.7	99.1	99.2	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

42-46,51-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥ 5/16	≥ 1/8
NO CEILING	75.1	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
≥ 20000	85.2	85.8	85.9	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 18000	86.0	86.6	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
≥ 16000	87.2	87.9	88.0	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
≥ 14000	89.0	89.7	89.9	89.9	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 12000	89.9	90.8	90.9	91.0	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 10000	92.4	93.3	93.5	93.5	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
IV 9000	92.9	93.7	93.9	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
IV 8000	93.8	94.7	94.9	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
IV 7000	94.7	95.5	95.8	95.8	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
IV 6000	95.8	96.7	96.9	97.0	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
IV 5000	97.0	97.9	98.2	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
IV 4500	97.1	98.0	98.2	98.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
IV 4000	97.4	98.3	98.6	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 3500	97.5	98.5	98.7	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 3000	97.8	98.7	99.0	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 2500	97.8	98.8	99.0	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 2000	98.1	99.1	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1800	98.1	99.1	99.3	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1500	98.1	99.1	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1200	98.1	99.1	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 1000	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 900	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 800	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 700	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 600	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 400	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 200	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 100	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 0	98.2	99.2	99.4	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2255



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1800-2000  
HOURS TST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.4	≥1	≥.5	≥.3	≥.25	≥.2	≥.16	≥.1
NO CEILING	79.4	79.6	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
≥ 20000	86.2	86.4	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 18000	87.2	87.4	87.4	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 16000	88.1	88.3	88.4	88.4	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 14000	89.9	90.3	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 12000	91.6	92.1	92.2	92.2	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 10000	93.1	93.6	93.7	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 9000	93.7	94.2	94.3	94.3	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 8000	94.8	95.3	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 7000	95.5	96.0	96.1	96.2	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 6000	96.8	97.3	97.4	97.5	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 5000	97.5	98.0	98.1	98.2	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 4500	97.7	98.2	98.3	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 4000	98.2	98.7	98.8	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 3500	98.3	98.8	98.9	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 3000	98.4	99.0	99.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2500	98.4	99.0	99.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2000	98.5	99.1	99.3	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1800	98.6	99.1	99.3	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 1500	98.6	99.2	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1200	98.6	99.2	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1000	98.6	99.2	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	98.6	99.2	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 800	98.6	99.2	99.4	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	98.6	99.2	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2290

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

42-4651-71

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	≥½	≥¼	≥16	≥¼	≥0
NO CEILING	83.7	84.0	84.0	84.0	84.0	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 20000	89.2	89.5	89.5	89.5	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 18000	89.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 16000	90.0	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 14000	91.0	92.3	92.3	92.3	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 12000	93.2	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 10000	94.1	94.7	94.8	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 9000	94.5	95.1	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 8000	95.2	95.9	96.0	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 7000	96.0	96.8	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 6000	97.0	97.9	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 5000	97.8	98.7	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4500	97.8	98.7	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 4000	97.9	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 3500	98.1	99.1	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 3000	98.2	99.2	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 2500	98.2	99.3	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 2000	98.4	99.4	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1800	98.4	99.4	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.4	99.4	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	98.4	99.4	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 900	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.4	99.5	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

2291

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-45, 51-71  
YEARS

DEC  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0000-0200  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	76.9	79.2	78.2	78.4	78.4	78.4	78.4	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
≥ 20000	82.8	84.2	84.2	84.3	84.3	84.3	84.3	84.6	84.6	84.6	84.6	84.6	84.6	84.7	84.7	84.7
≥ 18000	83.4	84.8	84.8	85.1	85.1	85.1	85.1	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 16000	84.1	85.5	85.5	85.8	85.8	85.8	85.8	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 14000	85.2	86.6	86.6	86.9	86.9	86.9	86.9	87.0	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1
≥ 12000	87.7	89.0	89.1	89.3	89.3	89.3	89.3	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 10000	89.3	90.7	90.7	90.9	90.9	90.9	90.9	91.1	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2
≥ 9000	90.0	91.4	91.4	91.6	91.6	91.6	91.6	91.8	91.8	91.8	91.8	91.8	91.8	91.9	91.9	91.9
≥ 8000	90.8	92.1	92.2	92.4	92.4	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 7000	92.5	93.9	94.0	94.2	94.2	94.2	94.2	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 6000	93.9	95.2	95.3	95.6	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.8	95.8	95.8
≥ 5000	94.9	96.4	96.5	96.7	96.7	96.7	96.7	96.9	96.9	96.9	96.9	96.9	96.9	97.0	97.0	97.0
≥ 4500	95.3	96.8	96.9	97.1	97.1	97.1	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.4	97.4	97.4
≥ 4000	95.6	97.2	97.3	97.5	97.5	97.5	97.5	97.7	97.7	97.7	97.7	97.7	97.7	97.8	97.8	97.8
≥ 3500	95.9	97.5	97.5	97.8	97.8	97.8	97.8	98.0	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1
≥ 3000	96.2	97.9	98.1	98.4	98.4	98.4	98.4	98.6	98.6	98.6	98.6	98.7	98.7	98.8	98.8	98.8
≥ 2500	96.3	98.0	98.3	98.7	98.7	98.7	98.7	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0
≥ 2000	96.6	98.4	98.8	99.1	99.1	99.1	99.1	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5
≥ 1800	96.6	98.5	98.8	99.1	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5
≥ 1500	96.6	98.5	98.9	99.2	99.3	99.3	99.3	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6
≥ 1200	96.6	98.5	98.9	99.2	99.3	99.3	99.3	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6
≥ 1000	96.7	98.6	99.0	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7
≥ 900	96.8	98.7	99.0	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8
≥ 800	96.8	98.7	99.0	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8
≥ 700	96.8	98.7	99.0	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8
≥ 600	96.8	98.7	99.0	99.3	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.7	99.7	99.8	99.8	99.8
≥ 500	96.8	98.8	99.1	99.4	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
≥ 400	96.8	98.8	99.1	99.5	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0	100.0	100.0
≥ 300	96.8	98.8	99.1	99.5	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0	100.0	100.0
≥ 200	96.8	98.8	99.1	99.5	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0	100.0	100.0
≥ 100	96.8	98.8	99.1	99.5	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0	100.0	100.0
≥ C	96.8	98.8	99.1	99.5	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2407

USAF ETAC

FORM  
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

23111

LUKE AFB ARIZONA/PHOENIX

41-45, 51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0300-0500  
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING	78.0	78.8	79.0	79.1	79.2	79.2	79.3	79.4	79.4	79.4	79.4	79.4	79.4	79.5	79.5	79.6
≤ 20000	82.6	83.0	84.0	84.1	84.2	84.2	84.3	84.4	84.4	84.4	84.4	84.4	84.4	84.5	84.5	84.6
≥ 18000	83.0	84.2	84.4	84.5	84.5	84.6	84.7	84.8	84.8	84.8	84.8	84.8	84.8	84.9	84.9	84.9
≥ 16000	83.5	84.8	84.9	85.1	85.1	85.2	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.5	85.5
≥ 14000	84.7	85.9	86.1	86.2	86.3	86.3	86.4	86.5	86.5	86.5	86.5	86.5	86.5	86.6	86.6	86.7
≥ 12000	87.1	88.3	88.5	88.6	88.7	88.7	88.8	88.9	88.9	88.9	88.9	88.9	88.9	89.0	89.0	89.1
≥ 10000	88.6	89.8	90.0	90.1	90.2	90.2	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.6
≥ 9000	89.6	90.8	91.0	91.1	91.1	91.2	91.3	91.4	91.4	91.4	91.4	91.4	91.4	91.5	91.5	91.5
≥ 8000	90.8	91.7	91.9	92.0	92.1	92.1	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.4	92.5	92.5
≥ 7000	92.2	93.5	93.7	93.8	93.8	93.9	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2
≥ 6000	93.4	94.7	94.9	95.0	95.1	95.1	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.4	95.4	95.5
≥ 5000	94.4	95.8	95.9	96.1	96.1	96.1	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.5	96.5
≥ 4500	94.5	95.9	96.1	96.2	96.3	96.3	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.6	96.6	96.7
≥ 4000	94.9	96.4	96.6	96.8	96.8	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.2	97.2	97.3
≥ 3500	95.1	96.8	97.1	97.3	97.3	97.3	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7
≥ 3000	95.4	97.3	97.8	98.0	98.1	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.4	98.4	98.5
≥ 2500	95.6	97.6	98.2	98.4	98.4	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.8	98.8	98.8
≥ 2000	95.9	98.0	98.5	98.7	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.2
≥ 1800	95.9	98.1	98.6	98.8	98.9	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.2	99.2	99.3
≥ 1500	95.9	98.1	98.6	98.8	98.9	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3
≥ 1200	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 1000	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 900	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 800	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 700	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 600	95.9	98.2	98.9	99.1	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6
≥ 500	95.9	98.3	98.9	99.1	99.3	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.7
≥ 400	95.9	98.3	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.8
≥ 300	95.9	98.3	99.0	99.2	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.8
≥ 200	95.9	98.3	99.0	99.2	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.8
≥ 100	95.9	98.3	99.0	99.2	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.8
≥ 0	95.9	98.3	99.0	99.2	99.4	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

2411

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

41-45, 51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0600-0800  
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING	73.1	74.1	74.2	74.3	74.3	74.3	74.4	74.4	74.4	74.4	74.5	74.5	74.6	74.6	74.6	74.7
≥ 20000	72.2	80.2	80.4	80.5	80.5	80.6	80.7	80.7	80.7	80.7	80.8	80.8	80.9	80.9	80.9	81.0
≥ 18000	79.8	80.9	81.1	81.2	81.2	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.6	81.6	81.6	81.6
IV 16000	80.4	81.4	81.6	81.7	81.7	81.8	81.9	81.9	81.9	81.9	82.0	82.0	82.1	82.1	82.1	82.2
IV 14000	82.0	82.1	83.2	83.3	83.3	83.3	83.5	83.5	83.5	83.5	83.5	83.6	83.6	83.7	83.8	83.8
IV 12000	84.5	85.7	85.9	86.0	86.0	86.1	86.2	86.2	86.2	86.2	86.2	86.2	86.4	86.4	86.4	86.4
IV 10000	86.0	87.1	87.3	87.4	87.4	87.5	87.6	87.6	87.6	87.6	87.6	87.7	87.7	87.8	87.8	87.9
IV 9000	86.7	87.9	88.0	88.1	88.1	88.2	88.2	88.2	88.2	88.2	88.4	88.4	88.4	88.5	88.6	88.6
IV 8000	88.1	89.3	89.5	89.6	89.6	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	90.0	90.0	90.1
IV 7000	89.6	90.8	91.0	91.2	91.2	91.3	91.3	91.3	91.3	91.4	91.4	91.4	91.4	91.6	91.6	91.6
IV 6000	91.2	92.5	92.7	92.9	92.9	93.0	93.1	93.1	93.1	93.1	93.2	93.2	93.3	93.3	93.3	93.4
IV 5000	93.0	94.5	94.7	94.9	94.9	95.1	95.1	95.1	95.1	95.2	95.2	95.2	95.3	95.4	95.4	95.4
IV 4500	93.6	95.1	95.3	95.4	95.5	95.7	95.7	95.7	95.7	95.8	95.8	95.8	95.9	96.0	96.0	96.0
IV 4000	94.4	96.0	96.2	96.4	96.5	96.7	96.8	96.8	96.8	96.8	96.9	96.9	97.0	97.0	97.0	97.1
IV 3500	94.7	96.4	96.7	96.9	97.0	97.2	97.3	97.3	97.3	97.3	97.4	97.4	97.5	97.6	97.6	97.6
IV 3000	95.0	96.9	97.2	97.6	97.6	97.8	97.9	97.9	97.9	98.0	98.0	98.0	98.1	98.2	98.2	98.2
IV 2500	95.1	97.1	97.4	97.8	97.9	98.1	98.2	98.2	98.2	98.3	98.3	98.3	98.4	98.5	98.5	98.5
IV 2000	95.4	97.5	97.9	98.3	98.3	98.6	98.7	98.7	98.7	98.8	98.8	98.8	98.9	99.0	99.0	99.0
IV 1800	95.5	97.6	98.0	98.4	98.5	98.8	98.9	98.9	98.9	99.0	99.0	99.0	99.1	99.2	99.2	99.2
IV 1500	95.6	97.7	98.2	98.5	98.7	99.0	99.0	99.0	99.0	99.1	99.2	99.2	99.3	99.3	99.3	99.4
IV 1200	95.6	97.8	98.3	98.7	98.8	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.4	99.5	99.5	99.5
IV 1000	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.6
IV 900	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.6
IV 800	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.6
IV 700	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.6
IV 600	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.6
IV 500	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.6	99.6	99.6
IV 400	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.6	99.6	99.7
IV 300	95.6	97.9	98.3	98.7	98.9	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.5	99.6	99.6	99.7
IV 200	95.6	97.9	98.3	98.7	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.7	99.7	99.8
IV 100	95.6	97.9	98.3	98.7	99.0	99.3	99.3	99.3	99.4	99.4	99.5	99.5	99.5	99.7	99.8	99.8
IV 0	95.6	97.9	98.3	98.7	99.0	99.3	99.3	99.4	99.4	99.4	99.5	99.5	99.5	99.7	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

2413

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/AC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

41-45,51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING	67.6	68.4	68.7	69.2	69.4	69.4	69.4	69.4	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.5
≥ 20000	78.1	79.0	79.5	80.0	80.2	80.2	80.2	80.2	80.2	80.4	80.4	80.4	80.4	80.4	80.4	80.4
≥ 18000	78.9	79.8	80.2	80.8	80.9	81.0	81.0	81.0	81.0	81.1	81.1	81.1	81.2	81.2	81.2	81.2
≥ 16000	79.7	80.6	81.0	81.6	81.7	81.8	81.8	81.8	81.8	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 14000	81.7	82.7	83.1	83.7	83.9	83.9	83.9	83.9	83.9	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 12000	83.9	84.9	85.3	85.9	86.1	86.1	86.1	86.1	86.1	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 10000	85.6	85.6	87.0	87.6	87.8	87.8	87.8	87.8	87.8	87.9	87.9	87.9	88.0	88.0	88.0	88.0
≥ 9000	86.7	87.7	88.1	88.7	88.8	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 8000	88.2	89.2	89.6	90.2	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.6	90.6	90.6	90.6
≥ 7000	89.5	90.5	90.9	91.4	91.6	91.7	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 6000	90.5	91.6	92.0	92.7	92.8	92.9	92.9	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 5000	92.0	93.7	94.2	94.8	95.0	95.1	95.1	95.1	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 4500	92.9	94.1	94.5	95.1	95.3	95.4	95.4	95.4	95.4	95.5	95.5	95.5	95.6	95.6	95.6	95.6
≥ 4000	93.8	94.9	95.4	96.0	96.2	96.3	96.3	96.4	96.4	96.5	96.5	96.5	96.6	96.6	96.6	96.6
≥ 3500	94.6	95.8	96.4	97.0	97.2	97.3	97.4	97.4	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 3000	95.0	96.4	97.0	97.7	97.9	98.0	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 2500	95.2	96.6	97.3	98.0	98.2	98.3	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 2000	95.4	96.9	97.6	98.3	98.5	98.7	98.8	98.9	98.9	99.0	99.0	99.0	99.1	99.1	99.1	99.1
≥ 1800	95.4	97.0	97.6	98.3	98.5	98.7	98.8	98.9	98.9	99.0	99.0	99.0	99.1	99.1	99.1	99.1
≥ 1500	95.5	97.1	97.8	98.5	98.6	99.0	99.1	99.2	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4
≥ 1200	95.5	97.2	97.9	98.5	98.8	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4
≥ 1000	95.6	97.2	98.0	98.6	98.9	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 900	95.6	97.3	98.0	98.7	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6
≥ 800	95.6	97.3	98.0	98.7	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 700	95.6	97.3	98.0	98.7	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 600	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 500	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 400	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 300	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 200	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 100	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7
≥ 0	95.6	97.3	98.1	98.8	99.0	99.2	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

2409

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

# CEILING VERSUS VISIBILITY

STATION 25111 LUKE AFB ARIZONA/PHOENIX STATION NAME

41-45, 51-71 YEARS

DEC MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1200-1400 HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≥ 0
NO CEILING	65.7	67.5	68.0	68.3	68.4	68.4	68.4	68.4	68.4	68.5	68.5	68.5	68.5	68.5	68.5	68.5
≥ 20000	77.8	79.7	80.3	80.6	80.7	80.7	80.7	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8
≥ 18000	78.7	80.6	81.2	81.5	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 16000	79.8	81.7	82.3	82.6	82.7	82.7	82.7	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 14000	81.7	83.6	84.2	84.5	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 12000	83.6	85.7	86.3	86.6	86.7	86.7	86.7	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8
≥ 10000	85.3	87.4	88.0	88.3	88.5	88.5	88.5	88.5	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 9000	86.3	88.6	89.2	89.5	89.7	89.7	89.7	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 8000	87.6	89.7	90.3	90.6	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 7000	88.5	90.7	91.2	91.6	91.8	91.8	91.8	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 6000	89.6	91.8	92.4	92.7	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 5000	91.7	93.9	94.4	94.8	95.0	95.0	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 4500	92.2	94.4	95.0	95.3	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 4000	93.1	95.3	95.9	96.3	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 3500	93.6	95.9	96.6	96.9	97.1	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 3000	94.1	96.6	97.3	97.7	97.9	98.0	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 2500	94.2	96.8	97.6	98.0	98.2	98.3	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 2000	94.6	97.3	98.1	98.5	98.7	98.8	99.0	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1800	94.7	97.4	98.2	98.5	98.8	98.9	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1500	94.9	97.5	98.3	98.7	99.0	99.0	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1200	94.9	97.5	98.4	98.8	99.0	99.1	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000	94.9	97.6	98.5	98.9	99.2	99.2	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	94.9	97.6	98.5	98.9	99.2	99.3	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	94.9	97.6	98.6	99.0	99.3	99.3	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	94.9	97.6	98.6	99.0	99.3	99.3	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	94.9	97.6	98.6	99.0	99.3	99.3	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	94.9	97.6	98.6	99.0	99.3	99.3	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	94.9	97.6	98.6	99.0	99.3	99.3	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	94.9	97.6	98.6	99.0	99.3	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
≥ 200	94.9	97.6	98.6	99.0	99.3	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
≥ 100	94.9	97.6	98.6	99.0	99.3	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
≥ 0	94.9	97.6	98.6	99.0	99.3	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2409

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

41-45, 51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .75	≥ .5	≥ .25	≥ .1	≥ .05	≥ .01	≥ 0
NO CEILING	65.1	66.9	67.2	67.3	67.6	67.6	67.5	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
≥ 20000	77.0	79.4	79.7	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 18000	78.0	80.4	80.8	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
≥ 16000	79.7	82.0	82.4	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 14000	81.6	84.0	84.4	84.7	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
≥ 12000	83.4	85.9	86.3	86.6	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 10000	85.0	87.4	87.9	88.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 9000	86.3	88.8	89.3	89.6	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 8000	87.4	89.9	90.3	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 7000	88.5	91.0	91.5	91.8	91.9	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 6000	89.7	92.3	92.7	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 5000	91.0	94.2	94.7	95.0	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 4500	92.1	94.7	95.2	95.5	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 4000	93.1	95.8	96.3	96.6	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 3500	93.9	96.6	97.2	97.5	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 3000	94.7	97.7	98.2	98.5	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 2500	94.7	97.7	98.3	98.6	98.8	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 2000	94.8	97.8	98.4	98.8	99.0	99.0	99.1	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1800	94.9	97.9	98.4	98.8	99.0	99.1	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1500	94.9	97.9	98.5	98.9	99.2	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1200	94.9	97.9	98.5	98.9	99.2	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000	94.9	98.0	98.5	99.0	99.3	99.3	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 900	94.9	98.0	98.5	99.0	99.3	99.3	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 800	94.9	98.0	98.6	99.0	99.4	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	94.9	98.0	98.7	99.1	99.5	99.5	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	94.9	98.0	98.7	99.1	99.5	99.5	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	94.9	98.0	98.7	99.1	99.5	99.5	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	95.0	98.0	98.7	99.1	99.5	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	95.0	98.0	98.7	99.1	99.5	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	95.0	98.0	98.7	99.1	99.5	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	95.0	98.0	98.7	99.1	99.5	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	95.0	98.0	98.7	99.1	99.5	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2413



1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

# CEILING VERSUS VISIBILITY

22111 LUKE AFB ARIZONA/PHOENIX

41-45, 51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

1870-2000  
HOURS YR

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.2	≥ 1	≥ .75	≥ .5	≥ .25	≥ .15	≥ .1	≥ 0
NO CEILING ≥ 20000	72.9 80.7	74.5 82.3	74.8 83.1	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3	74.8 83.3
IV 18000 IV 16000	41.7 82.7	83.0 84.8	84.1 85.1	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2	84.2 85.2
IV 14000 IV 12000	54.1 85.7	86.3 87.9	86.6 88.2	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3
IV 10000 IV 9000	87.1 87.8	89.3 90.0	89.5 90.3	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5	89.7 90.5
IV 8000 IV 7000	89.3 90.6	91.5 93.0	91.8 93.3	92.0 93.4	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5	92.0 93.5
IV 6000 IV 5000	92.0 93.2	94.4 95.7	94.7 96.1	94.9 96.2	94.9 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3	95.0 96.3
IV 4500 IV 4000	93.8 94.2	96.4 96.9	96.7 97.3	96.9 97.5	97.0 97.5	97.0 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6	97.1 97.6
IV 3500 IV 3000	94.6 95.3	97.4 98.2	97.8 98.6	98.0 98.8	98.0 98.8	98.1 98.9	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0	98.2 99.0
IV 2500 IV 2000	95.5 95.5	98.5 98.5	98.9 98.9	99.1 99.2	99.2 99.3	99.3 99.3	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4	99.3 99.4
IV 1800 IV 1500	95.6 95.6	98.6 98.6	99.0 99.0	99.3 99.3	99.3 99.4	99.4 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5
IV 1200 IV 1000	95.7 95.8	98.8 99.8	99.2 99.3	99.5 99.5	99.6 99.6	99.7 99.7	99.7 99.8	99.7 99.8	99.7 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IV 900 IV 800	95.8 95.8	99.8 99.8	99.3 99.3	99.5 99.5	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IV 700 IV 600	95.8 95.8	99.9 99.9	99.3 99.3	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
IV 500 IV 400	95.8 95.8	99.9 99.9	99.3 99.3	99.6 99.6	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
IV 300 IV 200	95.8 95.8	99.9 99.9	99.3 99.3	99.6 99.6	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
IV 100 IV 0	95.8 95.8	99.9 99.9	99.3 99.3	99.6 99.6	99.7 99.7	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9

1  
DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# CEILING VERSUS VISIBILITY

23111 LUKE AFB ARIZONA/PHOENIX

41-45,51-71

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

2100-2300  
HOURS (EST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 5-16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	76.0	77.5	77.5	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
≥ 18000	82.2	84.2	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 16000	82.7	84.7	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
≥ 14000	83.7	85.6	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 12000	85.4	87.4	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 10000	87.3	89.2	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 9000	89.0	90.9	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 8000	89.6	91.6	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 7000	90.5	92.5	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 6000	91.7	93.6	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 5000	93.2	95.2	95.4	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 4500	94.3	96.4	96.6	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 4000	95.0	97.1	97.3	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 3500	95.3	97.7	97.9	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3000	95.7	98.2	98.4	98.5	98.5	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 2500	95.9	98.4	98.6	98.8	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2000	96.1	98.6	98.9	99.0	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1800	96.3	98.8	99.1	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1500	96.4	98.9	99.2	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1200	96.5	99.1	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	96.6	99.2	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	96.6	99.2	99.5	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	96.6	99.2	99.5	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	96.6	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	96.6	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	96.6	99.3	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

2411

SKY COVER SUMMARY

Due to the reporting of total cloud amount in GWC tapes for airways hourly observations Jan 71 and later, clear, scattered, broken, overcast, partial and obscured are converted to 0, 3, 9, 10, 9 and 10 tenths. The sky cover summary for this station is limited to the period of record through Dec 70.

## PART D

## SKY COVER

This summary is prepared from hourly observations and is a percentage frequency distribution of total sky cover by tenths, plus mean sky cover, and total number of observations. It is presented in two tables as follows:

1. By month and annual - all hours and all years combined.
2. By month - by standard 3-hour groups.

NOTE: # 1: Sky cover (total cloud amount) was not reported by U. S. Services until mid 1945. Data, when available, were punched for Air Force stations beginning in 1946, but were not available for Navy stations until 1948 or 1949. Weather Bureau stations recorded total cloud amount in remarks beginning sometime in 1945, but few stations have punched data prior to 1948. This summary will, of course, be limited to period of available data.

NOTE: # 2: Some sources of punched data used for this summary report cloud amounts in oktas. These have been converted to tenths prior to summarizing, and notation is made on the form to indicate that data were originally reported in oktas. The manner of conversion is given below:

<u>OKTAS</u>	<u>TENTHS</u>
0	0
1	1
2	3
3	4
4	5
5	6
6	8
7	9
8 (or obscured)	10

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# SKY COVER

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,51-70  
PERIOD

ALL  
MONTH

## PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
JAN	ALL	40.2	4.9	4.9	4.4	3.3	2.6	3.4	4.1	5.5	3.8	22.9	4.1	14711
FEB		44.6	4.9	5.0	4.6	3.3	2.6	3.2	3.8	5.0	3.8	19.1	3.7	13220
MAR		41.6	5.1	5.6	4.5	3.8	2.9	3.5	4.1	5.1	4.0	19.3	3.8	14128
APR		51.6	5.4	5.3	4.7	3.8	2.7	3.4	3.9	4.1	3.2	12.0	2.9	14734
MAY		57.4	6.2	4.9	4.7	3.3	2.8	2.8	3.6	4.2	3.1	6.9	2.2	15618
JUN		65.8	5.9	4.9	3.6	3.2	2.2	2.7	2.9	3.0	1.8	4.1	1.7	15118
JUL		28.0	9.1	8.5	7.0	6.3	4.7	4.5	6.1	7.4	4.7	13.7	4.0	15610
AUG		31.9	8.3	7.7	7.1	5.6	4.6	4.3	5.6	6.8	4.6	13.6	3.9	15603
SEP		60.9	7.3	5.3	4.2	3.3	2.4	2.6	2.5	3.0	2.3	6.2	2.0	15116
OCT		59.0	5.6	5.3	4.2	3.3	2.5	2.8	3.3	3.5	3.1	7.4	2.2	15177
NOV		50.9	5.6	4.5	3.8	3.4	2.6	2.8	3.9	4.9	4.1	13.6	3.1	14745
DEC		46.4	5.1	4.8	3.8	3.3	2.4	3.1	3.6	4.7	3.7	19.1	3.6	14875
TOTALS		48.2	6.1	5.6	4.7	3.8	2.9	3.3	4.0	4.8	3.5	13.2	3.1	178655

## SKY COVER

JAN  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
JAN	00-02	51.9	3.6	5.0	4.7	3.5	2.2	3.0	3.0	3.5	1.9	17.7	3.1	1842
	03-05	53.1	3.1	3.9	3.8	2.8	1.9	3.2	3.8	3.5	1.9	19.0	3.2	1824
	06-08	41.3	4.6	5.4	4.4	3.1	2.5	3.4	3.9	5.0	4.7	21.8	4.0	1836
	09-11	34.2	5.7	4.3	3.6	2.7	2.2	3.0	4.2	7.0	5.1	27.9	4.8	1841
	12-14	31.2	5.6	4.3	3.6	2.9	3.5	3.8	4.6	7.0	4.5	28.9	5.0	1837
	15-17	27.7	6.5	4.7	4.9	4.2	3.1	2.8	4.3	7.0	6.1	28.6	5.1	1842
	18-20	35.7	5.9	5.8	4.9	3.4	2.2	3.5	4.8	7.2	4.0	22.6	4.3	1844
	21-23	46.1	4.1	5.8	5.2	3.5	3.3	4.3	4.5	4.1	2.1	17.0	3.4	1845
TOTALS		40.2	4.9	4.9	4.4	3.3	2.6	3.4	4.1	5.5	3.8	22.9	4.1	14711

## SKY COVER

**23111**  
**STATION**

LUKE AFB ARIZONA/PHOENIX

46,52-70

FEB  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10		
FEB	00-02	55.3	3.8	4.7	4.1	2.1	2.2	2.2	3.3	4.4	1.8	16.2	2.9	1652
	03-05	57.8	3.1	3.0	3.5	3.1	2.2	3.1	3.6	3.9	1.5	15.1	2.8	1653
	06-08	46.7	5.8	4.5	4.9	2.8	2.1	3.7	2.9	4.7	3.8	18.2	3.5	1653
	09-11	41.9	5.0	5.1	3.7	2.9	2.9	3.1	3.7	5.7	5.1	20.9	4.0	1653
	12-14	36.4	5.4	4.7	4.8	3.8	3.0	3.5	4.8	6.5	5.6	21.6	4.3	1653
	15-17	31.6	5.6	6.5	5.4	4.2	3.3	3.3	5.4	6.5	5.4	22.8	4.5	1652
	18-20	37.5	5.9	5.9	5.9	3.9	3.2	3.5	4.2	4.8	4.6	20.6	4.0	1651
	21-23	49.6	4.4	5.6	4.5	3.7	2.1	3.1	2.7	3.7	2.9	17.7	3.2	1653
TOTALS		44.6	4.9	5.0	4.6	3.3	2.6	3.2	3.8	5.0	3.8	19.1	3.7	13220

## SKY COVER

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

32670

MAR  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
MAR	00-02	53.6	4.1	5.0	4.5	2.9	2.1	2.7	4.1	4.6	2.0	14.3	2.9	1766
	03-05	54.8	2.8	5.8	4.3	2.8	2.4	3.0	3.1	3.4	1.6	16.0	2.9	1764
	06-08	41.3	6.6	6.1	4.0	3.1	1.9	3.3	4.5	5.5	4.1	19.5	3.8	1767
	09-11	38.6	5.6	5.2	3.9	3.7	3.6	3.1	2.9	6.5	4.7	22.0	4.1	1765
	12-14	31.1	6.2	5.8	4.7	4.1	3.7	4.0	4.3	8.3	6.5	21.3	4.6	1767
	15-17	26.1	5.4	6.5	5.4	5.3	3.8	4.1	4.5	6.9	6.4	23.7	4.8	1766
	18-20	36.0	5.8	5.4	5.1	4.1	2.9	3.1	5.7	6.2	3.9	21.7	4.2	1767
	21-23	49.1	4.2	4.9	4.3	4.0	2.7	4.6	3.9	4.0	2.5	15.9	3.2	1766
TOTALS		41.6	5.1	5.6	4.5	3.8	2.9	3.5	4.1	5.7	4.0	19.3	3.8	14128



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

## SKY COVER

**23111**  
**STATION**

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,52470

APR  
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
APR	00-02	63.6	4.0	5.0	4.3	2.5	1.8	2.3	2.9	3.0	1.6	8.7	2.1	1842
	03-05	61.7	4.5	5.4	4.4	3.0	1.7	2.3	3.5	2.5	1.6	9.4	2.2	1842
	06-08	51.7	5.3	5.1	4.7	4.0	2.4	3.3	3.7	4.1	3.6	12.2	2.9	1841
	09-11	49.1	6.0	5.3	3.7	3.9	2.8	3.4	3.6	4.1	4.3	13.7	3.1	1842
	12-14	42.8	7.1	4.6	5.2	3.9	4.0	3.2	5.0	5.6	4.5	14.2	3.5	1842
	15-17	39.6	6.5	5.6	4.5	5.3	3.7	4.5	4.9	5.9	4.3	15.2	3.7	1841
	18-20	43.6	5.8	6.7	6.0	4.8	2.8	4.5	3.7	5.1	3.7	13.3	3.3	1842
	21-23	60.6	3.8	4.7	4.5	2.7	2.6	4.0	4.0	2.5	1.6	9.2	2.3	1842
TOTALS		51.6	5.4	5.3	4.7	3.8	2.7	3.4	3.9	4.1	3.2	12.0	2.9	14734

## SKY COVER

MAY  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10		
MAY	00-02	70.9	3.5	4.3	3.9	2.5	1.9	1.6	2.2	2.6	1.6	5.0	1.5	1951
	03-05	56.9	4.3	5.3	4.4	2.9	1.9	1.9	2.6	3.4	1.6	4.7	1.7	1952
	06-08	57.7	5.0	4.6	4.4	2.6	2.5	3.3	3.5	5.2	3.6	7.8	2.5	1953
	09-11	56.6	7.7	4.0	3.7	2.7	2.7	3.2	3.4	4.6	3.4	8.0	2.4	1952
	12-14	50.8	8.9	5.7	4.4	3.3	2.5	2.9	3.6	5.5	3.8	8.7	2.7	1952
	15-17	40.9	8.1	5.7	5.3	4.2	3.9	3.5	4.6	3.9	4.1	9.5	2.9	1952
	18-20	48.5	7.4	5.0	5.4	4.9	3.9	3.1	5.0	5.5	4.6	6.7	2.8	1952
	21-23	61.0	4.9	4.5	5.9	3.4	2.9	3.2	3.9	3.0	2.2	5.1	2.0	1952
TOTALS		57.4	6.2	4.9	4.7	3.3	2.8	2.8	3.6	4.2	3.1	6.9	2.3	15618

## SKY COVER

**23111**  
**STATION**

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,51-70

JUN  
MORNING

MONTH	HOURS (L.S.T)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10		
JUN	00-02	74.5	4.1	3.5	3.1	2.2	1.5	2.1	1.9	2.6	.8	3.8	1.3	1889
	03-05	70.7	4.6	5.0	3.0	3.3	1.7	2.2	2.4	2.3	1.3	3.4	1.4	1890
	06-08	63.1	5.5	5.6	4.3	3.9	2.1	2.9	3.5	2.5	2.3	4.4	1.8	1890
	09-11	65.4	6.9	4.6	2.9	3.5	1.9	2.2	3.5	2.3	2.0	4.3	1.7	1890
	12-14	62.6	7.7	5.7	3.4	3.0	3.0	3.2	3.0	3.1	1.6	3.7	1.7	1889
	15-17	59.7	7.8	5.6	4.2	3.5	2.5	3.2	3.8	3.8	2.3	3.7	1.9	1890
	18-20	61.3	6.0	5.3	3.5	3.4	3.1	2.8	2.7	4.8	2.5	4.6	2.0	1890
	21-23	68.5	4.6	4.0	4.2	2.9	1.9	3.0	2.2	2.9	1.3	4.6	1.6	1890
TOTALS		65.4	5.9	4.9	3.6	3.2	2.2	2.7	2.9	3.0	1.8	4.1	1.7	15118

## SKY COVER

JUL  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
JUL	00-02	36.7	5.5	6.7	5.2	5.4	3.9	3.1	5.4	6.8	2.6	18.7	4.0	1948
	03-05	32.0	7.0	8.5	5.2	5.3	4.3	4.6	5.9	7.5	4.2	15.3	4.0	1949
	06-08	20.7	9.8	7.4	7.1	6.5	4.3	5.3	6.2	8.6	7.3	16.9	4.7	1951
	09-11	29.6	9.5	7.3	6.0	6.7	5.2	3.9	5.9	8.5	5.8	11.6	4.0	1952
	12-14	30.4	11.5	10.3	8.5	7.0	5.7	4.3	5.9	6.1	3.5	6.8	3.3	1953
	15-17	23.8	13.2	12.1	10.5	8.1	6.3	4.3	5.8	6.4	3.8	5.5	3.4	1951
	18-20	21.0	9.3	9.0	7.3	6.4	4.6	4.8	8.2	8.2	6.3	14.8	4.5	1953
	21-23	29.4	6.8	6.9	6.0	5.0	3.6	5.9	5.5	7.2	3.9	19.8	4.4	1953
TOTALS		28.0	9.1	8.5	7.0	6.3	4.7	4.5	6.1	7.4	4.7	13.7	4.0	15610

## SKY COVER

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,52-70

**AUG**  
**MONTH**

PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO OF OBS	
		0	1	2	3	4	5	6	7	8	9			10
AUG	00-02	38.7	4.9	6.0	6.0	4.7	3.3	3.5	5.5	5.7	2.6	19.0	3.9	1948
	03-05	38.1	5.5	6.7	6.6	5.8	3.2	5.0	4.3	5.3	3.0	16.5	3.7	1951
	06-08	28.4	7.6	7.4	6.7	5.9	4.2	3.3	6.2	8.5	6.4	15.5	4.3	1947
	09-11	34.6	9.1	6.6	6.9	5.5	4.5	3.9	5.2	7.8	4.9	11.0	3.6	1950
	12-14	32.4	12.2	9.5	8.6	5.4	5.6	4.6	5.7	5.3	4.1	6.5	3.2	1952
	15-17	25.1	13.0	11.0	9.6	7.3	6.5	5.3	5.3	6.1	5.1	5.7	3.5	1952
	18-20	23.0	8.7	7.6	7.1	4.7	4.9	4.1	7.2	9.2	7.6	15.2	4.6	1952
	21-23	33.9	5.7	6.5	5.3	5.1	4.2	5.0	5.3	6.3	3.3	19.3	4.2	1951
TOTALS		31.9	8.3	7.7	7.1	5.6	4.6	4.3	5.6	6.8	4.6	13.6	3.9	15603

### SKY COVER

SEP  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
SEP	00-02	68.4	5.6	4.7	3.0	3.1	1.6	1.9	2.1	2.1	1.2	6.5	1.6	1888
	03-05	66.2	5.5	5.2	4.3	2.3	1.5	2.4	1.5	1.7	1.0	6.3	1.6	1890
	06-08	55.6	8.2	5.9	5.6	3.7	3.1	2.8	3.1	3.6	3.0	5.6	2.2	1889
	09-11	61.3	7.8	5.0	3.2	3.1	2.4	2.6	2.5	3.5	2.0	5.5	2.0	1890
	12-14	58.5	9.3	5.0	4.4	3.6	2.4	2.8	3.1	2.7	2.6	5.5	2.0	1889
	15-17	52.2	11.1	6.3	5.2	4.2	3.7	2.5	2.8	3.8	2.6	5.4	2.2	1890
	18-20	56.5	7.8	5.4	4.1	4.0	2.3	2.5	2.9	4.3	3.1	7.0	2.3	1890
	21-23	66.2	4.4	4.8	3.6	2.1	1.9	3.1	2.1	2.3	2.1	7.4	1.9	1890
TOTALS		60.9	7.5	5.3	4.2	3.3	2.4	2.6	2.5	3.0	2.3	6.2	2.0	15116

## SKY COVER

**23111**  
**STATION**

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,51-70

OCT  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
OCT	00-02	70.7	3.5	4.6	2.5	2.1	2.2	2.2	2.2	2.6	1.0	6.4	1.6	1888
	03-05	69.8	4.0	3.7	3.1	2.6	2.1	2.5	2.7	2.0	1.2	6.2	1.6	1888
	06-08	56.3	5.9	4.5	4.4	3.2	2.6	3.4	3.5	4.4	3.8	7.9	2.5	1892
	09-11	55.4	5.8	5.2	4.2	2.5	3.1	2.8	4.3	3.7	4.6	8.4	2.6	1895
	12-14	50.9	7.2	6.1	5.7	3.8	2.9	3.0	3.9	4.7	5.0	6.8	2.6	1903
	15-17	44.1	8.0	6.9	5.0	4.5	3.2	2.8	3.5	4.7	4.6	8.6	2.8	1909
	18-20	55.4	6.3	5.8	4.5	3.9	2.6	3.1	3.3	4.2	2.7	8.1	2.4	1906
	21-23	65.5	4.1	5.3	4.5	3.5	1.6	2.5	3.0	1.8	1.5	6.8	1.8	1896
TOTAL		59.0	5.6	5.3	4.2	3.3	2.5	2.8	3.3	3.5	3.1	7.4	2.2	15177

## SKY COVER

**23111**  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

46,51-70

NOV  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
NDV	00-02	62.7	3.5	4.2	3.3	3.0	1.7	2.6	3.1	3.4	1.5	11.1	2.3	1943
	03-05	62.9	3.9	3.7	2.3	3.2	1.8	2.7	2.9	3.1	1.7	11.8	2.3	1841
	06-08	49.9	6.1	5.2	3.6	3.1	2.1	2.7	3.6	4.8	5.1	13.8	3.1	1843
	09-11	44.5	6.7	4.3	3.3	4.3	3.1	2.4	4.4	5.5	6.0	15.6	3.6	1844
	12-14	42.9	5.9	4.0	4.4	4.1	3.6	2.5	3.9	7.2	5.3	16.3	3.7	1844
	15-17	39.6	8.4	5.0	4.5	2.8	3.0	2.7	4.3	7.0	6.9	15.9	3.8	1840
	18-20	47.6	5.9	4.8	4.6	3.5	2.4	3.3	4.8	5.0	3.7	14.4	3.3	1845
	21-23	56.7	4.0	5.4	4.1	3.4	2.7	3.5	4.0	3.5	2.8	9.9	2.6	1845
TOTALS		50.9	5.6	4.6	3.8	3.4	2.6	2.8	3.9	4.9	4.1	13.6	3.1	14745



## SKY COVER

CEC  
MONI

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
DEC	00-02	56.8	4.0	4.5	3.5	3.1	1.9	2.6	2.8	2.8	2.8	15.1	2.8	1860
	03-05	60.0	2.9	4.2	2.6	3.4	1.8	1.9	2.4	2.9	1.8	16.0	2.7	1860
	06-08	47.4	4.8	5.1	4.1	3.4	1.8	3.5	3.6	4.8	4.1	17.2	3.4	1857
	09-11	40.3	6.0	4.5	4.0	3.3	2.3	3.2	3.8	5.6	5.8	21.1	4.1	1860
	12-14	36.7	6.3	4.4	3.9	3.7	3.0	3.0	4.5	6.2	5.4	22.8	4.3	1860
	15-17	34.5	5.6	5.4	3.9	3.4	2.9	3.5	5.1	5.6	5.7	24.4	4.5	1859
	18-20	42.7	6.3	6.0	4.5	3.5	2.4	3.5	3.4	5.9	2.0	19.8	3.7	1860
	21-23	53.0	4.8	4.1	3.8	2.6	2.8	3.6	2.9	4.1	1.7	16.7	3.0	1859
TOTALS		46.4	5.1	4.8	3.8	3.3	2.4	3.1	3.6	4.7	3.7	19.1	3.6	14875

DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAC)  
ASHEVILLE, NORTH CAROLINA

## PART E

## PSYCHROMETRIC SUMMARIES

In this section are presented various summaries of dry- and wet-bulb temperatures, dew points, and relative humidity. The order and manner of presentation follows:

1. Cumulative percentage frequency of occurrence - derived from daily observations and presented by month and annual for all years combined. These tabulations provide the cumulative percentage frequency to tenths of temperature by 5-degree Fahrenheit increments, plus mean temperature, standard deviation, and total number of observations in three separate tables as follows:
  - a. Daily maximum temperature
  - b. Daily minimum temperature
  - c. Daily mean temperature
2. Extreme values - derived from daily observations with extreme value given for each year and month of record available. Extremes are provided for a month if all days for a month contain valid observations. All months for a year must have valid extremes before the ANNUAL value is selected for that year. Means and standard deviations are computed for months and annual when four or more values are present for any column. Two tables of daily extreme temperatures are prepared:
  - a. Extreme maximum temperature
  - b. Extreme minimum temperature

NOTE: A supplementary list also provides extreme temperatures when less than a full month is reported.
3. Bivariate percentage frequency distribution and computations of dry-bulb versus wet-bulb temperature. This tabulation is derived from hourly observations and is presented by month and annual, all hours and all years combined. The following information is provided:
  - a. The main body of the summary consists of a bivariate percentage frequency distribution of wet-bulb depression in 17 classes spread horizontally; by 2-degree intervals of dry-bulb temperature vertically. Also provided for each dry-bulb temperature interval is the percentage of observations with dry-bulb and wet-bulb temperature combined; and again for dry-bulb, wet-bulb, and dew-point temperatures separately. Total observations for these four items is also provided in two lines at end of each tabulation table, which may require two pages in some cases.

NOTE: A percentage frequency in this table of ".0" represents one or more occurrences amounting to less than .05 percent.

b. Statistical data for the individual elements of relative humidity, dry-bulb, wet-bulb, and dew-point temperatures are shown in the section at the bottom left of the forms. These consist of the sum of squares ( $\sum X^2$ ), sums of values ( $\sum X$ ), means ( $\bar{X}$ ), and standard deviations ( $\sigma x$ ). The number of observations used in the computations for each element is also shown.

c. At the lower right of the form are given the mean number of hours of occurrence for six ranges of dry-bulb, wet-bulb, and dew-point temperatures, and total number of hours possible in the period represented. Mean number of hours is shown to tenths and indicates mean number of hours per year in the annual summary, or mean number of hours per month in the tabulations by month.

NOTE: Wet-bulb temperature usually was not reported prior to 1946. Relative humidity usually was not reported prior to 1949, nor subsequent to June 1958; and was computed by machine methods for observations recorded during these periods. All values of dew-point temperature and relative humidity are with respect to water, unless otherwise indicated.

4. Means and standard deviations - These tabulations are derived from hourly observations and present the mean, standard deviation, and total number of observations for the eight standard 3-hour groups, by month and annual and again at the bottom for all hours combined. Records for all years available are combined. Tables are prepared for the following:

- a. Dry-bulb temperature
- b. Wet-bulb temperature
- c. Dew-point temperature

5. Cumulative percentage frequency of occurrence of relative humidity - This summary is derived from hourly observations and presents the cumulative percentage frequency of occurrence of relative humidity by increments of 10% classes, plus the mean relative humidity and total number of observations in two tables.

- a. Table 1 is prepared by month and annual, all years combined, with month being the vertical argument.
- b. Table 2 is prepared by month by standard 3-hour groups, with the hour groups being the vertical argument and a separate page for each month. All years are also combined for this summary.

DATA PROCESSING BRANCH  
 USAF ETAC  
 AIR WEATHER SERVICE/MAC  
 22111 LUKE AFB ARIZONA/PHOENIX

# DAILY TEMPERATURES

41-46, 51-72

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
 (FROM DAILY OBSERVATIONS)

MAXIMUM

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
115						1.2	1.2	.1					.2
110					.6	10.9	15.0	4.0	.9				2.7
105					3.5	32.6	56.6	30.7	17.1	.1			11.9
100				.6	15.7	61.9	88.0	72.9	45.6	2.4			24.2
95			.1	8.3	42.8	81.1	97.1	91.8	70.4	15.9			34.5
90		.1	2.6	22.2	67.1	93.1	99.0	90.3	86.8	40.1	.3		43.1
85	.1	2.2	13.0	46.5	81.6	98.9	99.6	99.4	95.6	65.9	7.5	.1	51.5
80	1.5	9.5	31.4	68.1	92.3	99.9	100.0	99.8	98.3	81.9	26.4	.7	59.7
75	8.1	24.5	50.6	80.9	97.7	100.0		99.9	99.7	91.9	30.1	11.9	68.4
70	28.9	48.5	70.5	90.9	99.4			100.0	100.0	97.3	71.1	32.6	78.5
65	55.5	71.0	84.1	97.2	100.0					98.8	87.6	57.1	87.7
60	76.2	87.2	95.8	99.5						99.6	96.3	80.8	94.6
55	91.9	96.8	99.5	99.9						100.0	99.0	92.2	98.3
50	98.3	99.4	100.0	100.0							99.7	98.0	99.6
45	99.4	100.0									100.0	99.6	99.9
40	100.0											100.0	100.0
35													
30													
25													
20													
15													
10													
5													
0													
MEAN	64.9	68.9	74.3	82.6	92.0	100.9	104.8	101.8	97.8	88.7	73.8	65.6	84.5
S D	7.281	7.825	8.765	8.807	7.916	7.081	5.048	5.100	6.878	7.976	7.695	7.275	16.029
TOTAL OBS	806	721	775	794	817	810	806	804	780	806	735	806	9490

DATA PROCESSING BRANCH  
USAF ETAC

AIR WEATHER SERVICE/MAC

23111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

## DAILY TEMPERATURES

STATION

STATION NAME

YEARS

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM DAILY OBSERVATIONS)

MINIMUM

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
90							.4						.0
85						1.5	11.0	3.0	.1				1.3
80					.2	9.4	47.0	30.3	4.5				7.8
75					2.1	24.4	80.9	74.4	21.0				17.2
70				.4	9.5	48.9	93.7	93.7	50.6	2.4			25.4
65			.1	2.3	29.5	75.2	99.5	98.4	76.5	13.6	.1		33.6
60			1.8	14.1	62.1	94.4	100.0	100.0	93.1	35.9	1.7		42.5
55	1.2	2.1	8.8	41.3	86.0	99.5			99.1	64.4	9.4	1.0	51.8
50	5.7	15.5	31.2	71.8	97.6	100.0			100.0	86.7	27.5	5.3	62.4
45	17.1	36.2	63.9	90.7	99.8					96.8	59.3	18.0	73.9
40	48.5	63.2	87.5	99.1	100.0					99.6	82.1	46.0	85.7
35	73.7	86.0	98.1	100.0						99.9	94.6	82.8	95.2
30	86.1	92.5	99.0								98.2	90.9	97.2
25	94.9	98.3	99.9							100.0	100.0	97.1	99.2
20	99.3	100.0	100.0									99.9	99.9
15	100.0											100.0	100.0
10													
5													
0													
MEAN	39.2	42.0	46.6	52.9	61.3	69.3	78.6	77.0	69.3	56.9	45.8	39.5	56.6
S D	6.087	6.569	6.039	5.995	6.140	6.887	4.957	4.871	6.162	6.627	6.333	5.651	15.078
TOTAL OBS	806	721	775	794	817	810	806	804	780	806	765	806	9490

1

DATA PROCESSING BRANCH

USAF ETAC

AIR WEATHER SERVICE/MAC

29111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

## DAILY TEMPERATURES

STATION

STATION NAME

YEARS

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM DAILY OBSERVATIONS)

MEAN

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN.	JUL	AUG.	SEP	OCT.	NOV.	DEC	ANNUAL
100						.6	1.2	.4					.2
95						7.3	25.8	9.2	.9				3.7
90					1.6	29.1	75.3	54.4	14.7				14.9
85					9.5	56.8	95.2	89.4	46.4	.4			25.2
80				2.4	35.9	81.0	99.5	98.9	77.7	13.6			34.6
75			1.5	16.9	66.5	95.4	100.0	99.6	94.4	36.2	.4		43.2
70		1.0	8.2	44.5	86.2	99.9		100.0	99.1	69.4	4.4		51.8
65	.5	8.0	29.7	70.7	95.8	100.0			99.9	87.5	23.7	1.1	60.4
60	9.2	27.2	58.7	87.8	99.8				100.0	96.2	55.8	9.7	70.8
55	38.1	57.8	80.4	97.4	100.0					99.1	80.9	36.1	82.7
50	70.5	82.7	95.7	99.9						99.8	95.6	74.3	93.3
45	90.6	95.7	99.6	100.0						100.0	99.2	92.9	98.2
40	98.6	100.0	100.0								100.0	99.5	99.8
35	99.9											100.0	100.0
30	100.0												100.0
MEAN	52.2	55.7	60.6	68.0	76.8	85.4	91.9	89.6	83.7	72.0	60.0	52.7	70.7
S D	5.623	6.295	6.549	6.808	6.391	6.241	4.009	4.081	5.549	6.419	5.971	5.233	15.145
TOTAL OBS	806	721	775	794	817	810	806	804	780	806	765	806	9490

USAF ETAC FORM 0-21.5 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## EXTREME VALUES

MAXIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

20111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-46, 51-72  
YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
41												79	
42	77	77	90	90	106	113	116	110	108	100	87	78	116
43	80	85	91	102	104	108	114	106	108	98	84	73	114
44	78	79	81	88	98	111	109	111	107	100	86	74	111
45	77	78	83	98	98	110	110	108	112	95	89	76	112
46	78			98	99	108	108	110	108	89			
51					112	109	112	108	107	99	81	76	
52	75	77	82	94	103	110	112	110	110	102	85	77	112
53	81	82	89	98	99	112	114	110	108	100	88	78	114
54	82	86	86	101	101	115	116	111	108	100	89	79	116
55	76	81	89	93	104	114	111	106	110	105	89	81	114
56	82	78	93	93	108	114	117	109	109	99	88	78	117
57	71	91	86	93	102	117	115	109	108	100	80	79	117
58	76	81	81	99	111	112	118	110	107	99	85	87	118
59	77	79	86	100	101	114	115	109	108	98	83	80	115
60	75	73	94	96	110	118	114	112	105	99	88	76	118
61	80	81	87	98	99	115	112	110	100	97	81	75	115
62	76	81	86	99	100	110	108	111	106	96	86	78	111
63	75	88	82	94	103	105	110	106	104	101	93	79	110
64	72	73	89	94	101	109	112	111	104	97	81	70	112
65	78	78	85	97	100	104	112	110	101	94	87	78	112
66	70	73	90	94	103	110	113		103	52	89	77	
67	76	82	88	86	103	108	113		103	96	90	66	
68	74	81	87	91		114	109	105	107	94	79	72	
69	74	74	92	95	109	112	117	116	108	98	82	77	117
70	73	85	84	89	106	113	113	109	107	90	82	73	115
71	85	81	93	93	97	110	113	104	106	93	86	76	113
72	78	86	95	92	102	116							
MEAN	76.7	80.4	87.6	94.9	103.0	111.6	112.8	109.2	106.8	97.3	85.5	76.6	114.2
S D	3.519	4.708	4.104	4.073	4.200	3.489	2.786	2.553	2.772	3.709	3.630	3.930	2.448
TOTAL OBS.	806	707	775	780	806	813	806	744	780	806	750	806	9376

## EXTREME VALUES

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

41-46, 51-72

**YEARS**

[illegible]



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# EXTREME VALUES

MINIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

28111 LUKE AFB ARIZONA/PHOENIX 41-46, 51-72  
STATION STATION NAME YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
41												30	
42	31	29	35	40	47	59	69	60	60	39	38	30	29
43	32	33	40	41	50	54	60	68	58	41	31	31	31
44	27	32	36	41	52	53	56	68	61	50	32	32	27
45	30	32	34	35	52	53	70	71	52	45	36	26	26
46	29			42	53	61	66	72	65	42			
51					43	56	69	65	61	43	37	28	
52	29	29	34	46	54	60	62	70	55	49	30	31	29
53	34	29	38	40	47	58	74	62	56	45	32	23	23
54	29	38	37	44	48	54	71	63	60	43	40	27	27
55	30	26	35	38	48	55	64	71	55	40	35	32	26
56	32	25	32	41	53	55	66	63	64	41	31	27	25
57	33	35	40	43	51	61	73	60	58	50	33	34	33
58	30	36	38	39	56	60	69	75	60	49	30	29	29
59	30	32	36	52	46	60	73	71	56	47	37	33	30
60	28	26	39	43	50	47	70	69	54	47	36	26	26
61	34	37	40	47	55	57	68	70	57	41	31	31	31
62	24	30	33	49	50	53	60	64	62	50	36	31	24
63	21	36	36	43	53	55	71	70	64	34	49	30	21
64	24	28	32	40	43	58	73	69	61	47	32	29	24
65	33	32	31	41	44	56	74	65	50	46	37	33	31
66	29	30	30	45	56	61	72		64	44	36	28	
67	26	34	36	42	47	59	74		63	49	42	31	
68	31	39	50	41		60	67	62	54	46	38	27	
69	32	33	31	48	50	63	67	74	64	47	39	32	31
70	27	34	39	40	49	57	69	76	58	42	36	34	27
71	24	30	28	44	50	57	70	72	58	32	38	32	24
72	29	32	41	44	54	69							
MEAN	29.3	31.9	35.6	42.7	50.2	58.7	69.2	57.9	58.8	45.0	33.3	29.9	27.3
S D	3.519	3.743	3.616	2.654	3.724	4.168	3.648	4.690	4.160	4.591	3.623	2.747	3.199
TOTAL OBS.	806	707	773	790	806	510	806	744	750	806	750	806	9376



## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

41-46, 51-72

ALL  
MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point												
118/117																		.0	8	8													
116/115																		.0	41	41													
114/113																		.1	135	135													
112/111																		.1	315	315													
110/109																.0		.3	719	720													
108/107														.0	.0	.0		.6	1428	1428													
106/105											.0	.0	.0	.0	.0	.1	.9	.9	2270	2270													
104/103											.0	.0	.0	.0	.1	.2	1.0	.3	3095	3095													
102/101										.0	.0	.0	.0	.1	.3	.3	.9	.7	3511	3513													
100/99										.0	.0	.0	.1	.3	.3	.3	.9	.9	4467	4469													
98/97									.0	.0	.0	.1	.3	.3	.3	.2	.9	.9	4847	4848													
96/95									.0	.0	.1	.2	.4	.3	.3	.2	.8	.8	5541	5543													
94/93							.0	.0	.0	.1	.2	.4	.3	.3	.3	.3	.7	.7	5784	5784													
92/91							.0	.0	.1	.2	.4	.3	.3	.3	.3	.3	.6	.6	6192	6193													
90/89						.0	.0	.1	.2	.4	.3	.3	.3	.3	.4	.5	.4	.1	7176	7178													
88/87						.0	.1	.2	.4	.4	.3	.2	.3	.3	.4	.5	.1	.1	7238	7239													
86/85				.0	.0	.1	.2	.3	.4	.3	.3	.3	.3	.4	.5	.3	.0	.0	7831	7833	4												
84/83			.0	.0	.0	.2	.3	.3	.3	.2	.3	.3	.4	.5	.5	.2	.0	.0	7605	7609	3												
82/81			.0	.0	.1	.3	.3	.2	.2	.2	.3	.4	.5	.5	.3	.0	.0	.0	7813	7814	16												
80/79		.0	.0	.1	.2	.3	.2	.2	.2	.3	.4	.5	.6	.5	.2	.0	.0	.0	8244	8245	68	3											
78/77		.0	.1	.2	.2	.1	.1	.1	.2	.3	.4	.6	.6	.3	.1	.0	.0	.0	7735	7736	822	4											
76/75		.0	.1	.2	.1	.1	.1	.2	.3	.4	.6	.7	.5	.2	.0	.0	.0	.0	7761	7764	3714	77											
74/73	.0	.1	.1	.1	.1	.1	.1	.2	.3	.5	.7	.6	.3	.1	.0	.0	.0	.0	7361	7361	8594	422											
72/71	.0	.0	.1	.1	.1	.1	.1	.2	.3	.4	.6	.7	.5	.2	.0	.0	.0	.0	7262	7264	11589	1301											
70/69	.0	.0	.0	.1	.1	.1	.2	.4	.6	.7	.7	.3	.1	.0	.0	.0	.0	.0	7967	7969	11065	2533											
68/67	.0	.0	.0	.1	.1	.2	.3	.5	.7	.7	.5	.2	.0	.0	.0	.0	.0	.0	7538	7541	8882	3650											
66/65	.0	.0	.0	.1	.1	.2	.4	.6	.8	.7	.3	.1	.0	.0	.0	.0	.0	.0	7996	7996	8526	4902											
64/63	.0	.0	.1	.1	.2	.3	.5	.7	.7	.5	.2	.0	.0																				

## PSYCHROMETRIC SUMMARY

ALL

ΔΕΛ

ALL  
HOURS (L. S. Y.)

[illegible]

## PSYCHROMETRIC SUMMARY

ALL  
MONTH

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0.26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

JAN  
MONTH

ALL  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX 42-46,52-72 JAN  
STATION STATION NAME YEARS MONTH

PAGE 2 ALL  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
16/ 15																					344		
14/ 13																					244		
12/ 11																					214		
10/ 9																					214		
8/ 7																					184		
6/ 5																					173		
4/ 3																					126		
2/ 1																					80		
0/ -1																					52		
-2/ -3																					27		
-4/ -5																					20		
-6/ -7																					28		
-8/ -9																					11		
-10/ -11																					6		
-12/ -13																					6		
-14/ -15																					2		
-16/ -17																					2		
-18/ -19																					2		
-20/ -21																					2		
TOTAL	.9	11.0	14.0	15.4	13.5	11.6	9.3	7.3	6.4	5.0	2.9	1.7	.7	.1	.0			19187	19187	19187			
																		19187		19187			
Element (X)	Σ x <sup>2</sup>		Σ x		x̄		s <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature						Total						
Rel. Hum.	60391921		985989		51.422512		19187		≤ 0 F		≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb	52263998		982090		51.210199		19187				14.5	62.1	14.3	1.0		744							
Wet Bulb	35626498		815468		42.57104		19187				65.1					744							
Dew Point	20955916		598280		31.210950		19187		6.2		383.2					744							

## PSYCHROMETRIC SUMMARY

42-46, 52-72

FFB

STATION

STATION NAME

YEARS

**MONTH**

PAGE 1

ALL

HOUPS (L. S. I.)

[illegible]



## PSYCHROMETRIC SUMMARY

FEB  
MONTH

STATION

STATION NAME

YEARS

**MONTH**

ALL

HOURS (L, S, T.)

[illegible]

USAFETAC FORM 0-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
96/ 95																	.0	2	2						
94/ 93																	.1	11	11						
92/ 91																	.0	26	26						
90/ 89															.0		.1	54	54						
88/ 87													.0	.0	.2	.3	.1	111	111						
86/ 85												.0	.1	.2	.4	.3	.1	181	181						
84/ 83											.0	.0	.2	.4	.5	.2	.0	246	246						
82/ 81										.0	.1	.1	.4	.6	.5	.1	.0	331	331						
80/ 79										.0	.1	.3	.9	.9	.3	.0		457	457						
78/ 77									.0	.1	.3	.7	1.0	.5	.1	.0		523	523						
76/ 75								.0	.1	.2	.7	.9	.9	.4	.1			582	582						
74/ 73								.1	.2	.6	.9	1.0	.7	.2	.0			669	669						
72/ 71							.1	.1	.5	.8	1.0	.9	.4	.1				731	731						
70/ 69			.0		.0	.1	.4	.6	1.2	1.1	.8	.4	.0					869	869						
68/ 67				.0	.0	.1	.3	.6	1.0	1.0	.9	.5	.1					826	826						
66/ 65				.0	.1	.2	.6	.9	1.3	1.2	.7	.2	.0					967	967						
64/ 63				.3	.1	.4	.8	1.1	1.3	1.1	.5	.1	.0					1009	1009	13					
62/ 61		.0	.0	.1	.3	.7	1.0	1.2	1.3	.8	.3	.0						1069	1069	93					
60/ 59		.1	.1	.2	.7	.9	1.0	1.4	1.0	.5	.1	.0						1152	1153	325	2				
58/ 57		.1	.3	.5	.8	1.1	1.3	1.2	.7	.3	.0							1180	1180	715	13				
56/ 55	.0	.2	.4	.8	1.1	1.3	1.6	.9	.5	.2	.0							1283	1283	1275	29				
54/ 53	.0	.1	.7	.9	1.2	1.4	1.1	.8	.3	.1								1203	1203	1632	76				
52/ 51	.0	.3	.8	1.0	1.2	1.2	1.0	.3	.2									1116	1116	1924	155				
50/ 49	.0	.5	1.0	1.0	1.2	1.2	.6	.2	.0									1077	1077	2131	250				
48/ 47		.5	.9	.9	1.0	.9	.4	.2	.0									887	887	2201	461				
46/ 45	.1	.6	.9	.8	.7	.6	.2	.0										681	681	2159	686				
44/ 43	.1	.5	.7	.6	.5	.4	.1	.0										478	478	1838	947				
42/ 41	.0	.3	.5	.4	.4	.2	.0											349	349	1437	1169				
40/ 39	.0	.3	.3	.3	.3	.1	.0											231	231	1057	1234				
38/ 37	.0	.1	.2	.1	.1	.1												112	112	748	1284				
36/ 35		.1	.1	.1	.1	.0												56	56	479	1492				
34/ 33		.0	.0	.0	.0													11	11	255	1426				
32/ 31		.0	.0	.0	.0													14	14	119	1445				
30/ 29		.0	.0															3	3	66	1445				
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature														
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total		
Dry Bulb																									
Wet Bulb																									
Dew Point																									

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

YEARS

AR  
MONTH  
ALL  
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	>31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point			
28/ 27																		1	1	20	1264			
26/ 25																				9	1101			
24/ 23																					920			
22/ 21																				3	725			
20/ 19																					502			
18/ 17																					550			
16/ 15																					367			
14/ 13																					280			
12/ 11																					202			
10/ 9																					134			
8/ 7																					126			
6/ 5																					74			
4/ 3																					70			
2/ 1																					35			
0/ -1																					15			
-2/ -3																					3			
-4/ -5																					5			
-6/ -7																					7			
-8/ -9																					2			
-10/ -11																					1			
TOTAL	.2	3.7	6.3	7.9	9.9	10.9	10.3	9.4	9.3	8.1	6.6	5.7	4.9	3.3	2.1	1.0	.5	18499	18500	18500				

0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM 0-26.5 (OLA)  
MIL AG

## PSYCHROMETRIC SUMMARY

APP

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

HOURS (L. S. Y.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11	12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	>31	Dry Bulb	Wet Bulb	Dew Point														
102/101																		.0	3	3															
100/ 99																	.0	.1	13	13															
98/ 97																	.0	.0	.3	62	62														
96/ 95																	.0	.1	.5	122	122														
94/ 93														.0	.0		.1	.1	.3	197	197														
92/ 91														.0	.1		.1	.3	.9	254	254														
90/ 89													.0	.1	.2		.2	.6	.9	381	381														
88/ 87										.0	.0		.0	.1	.2		.5	1.0	.5	469	469														
86/ 85										.0	.0	.0	.1	.3	.5	1.2	1.3	.1	.1	662	662														
84/ 83										.0	.0	.1	.3	.4	.9	1.3	.5	.0	.0	685	685														
82/ 81									.0	.0	.1	.2	.4	.8	1.1	1.1	.1	.0	.0	724	724														
80/ 79							.0	.0	.0	.2	.4	.5	1.1	1.4	.7	.0				830	830														
78/ 77								.0	.1	.4	.6	1.0	1.4	1.0	.1					887	887														
76/ 75						.0	.0	.1	.2	.5	.9	1.3	1.3	.4	.0					917	917														
74/ 73						.0	.1	.1	.3	.7	1.3	1.4	1.0	.1	.0					926	926														
72/ 71					.0	.0	.1	.3	.6	.9	1.3	1.3	.4	.0						927	927	2													
70/ 69				.0	.0	.1	.2	.6	.8	1.4	1.8	.9	.2	.0						1122	1122	10													
68/ 67			.0	.1	.1	.4	.8	1.0	1.3	1.2	.3	.1								1074	1074	42													
66/ 65			.0	.1	.1	.2	.6	1.1	1.5	1.6	.7	.2	.0							1161	1161	106													
64/ 63			.0	.1	.2	.4	.9	1.3	1.7	1.2	.3	.1								1163	1163	236													
62/ 61		.0	.1	.1	.3	.5	1.0	1.4	1.3	.6	.1	.0								1016	1017	623													
60/ 59		.0	.1	.2	.4	.9	1.3	1.7	1.3	.3	.1	.0								1148	1143	1106													
58/ 57		.1	.3	.3	.4	.9	1.1	1.3	.6	.1	.0									989	989	1640													
56/ 55		.1	.2	.3	.6	1.1	1.4	.9	.2	.3										921	921	2086													
54/ 53		.1	.3	.3	.5	.9	1.2	.4	.1	.0										662	662	2235													
52/ 51	.0	.1	.2	.3	.3	.6	.7	.2	.0											536	536	2238													
50/ 49	.0	.1	.2	.4	.5	.6	.3	.1	.0											427	427	2176													
48/ 47		.1	.2	.3	.3	.5	.2	.0												312	312	1964													
46/ 45		.1	.1	.2	.2	.3	.1	.0												172	172	1607													
44/ 43		.1	.1	.1	.1	.1	.1	.0	.0											108	108	1213													
42/ 41		.0	.0	.1	.0	.0	.0													37	37	757													
40/ 39		.0		.0	.0	.0	.0													9	9	465													
38/ 37				.0	.0															4	4	251													
36/ 35																						115													
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			σ <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																			
Rel. Hum.																≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total							
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			



## PSYCHROMETRIC SUMMARY

MAY  
MONTH

ALL  
HOURS 11.5.1.

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

453  
MONTH

PAGE 2

ALL  
HOURS / S

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL			TOTAL		
	0	1	2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	+31	D.B.	W.B.	Dry Bulb	Wet Bulb	Dew Point													
44/ 43																					2	2	357	884												
42/ 41																						190	1071													
40/ 39																						55	1486													
38/ 37																						24	1778													
36/ 35																						11	1951													
34/ 33																						3	2038													
32/ 31																								2017												
30/ 29																								1877												
28/ 27																								1230												
26/ 25																								1114												
24/ 23																								793												
22/ 21																								583												
20/ 19																								317												
18/ 17																								289												
16/ 15																								199												
14/ 13																								108												
12/ 11																								69												
10/ 9																								26												
8/ 7																								37												
6/ 5																								21												
4/ 3																								9												
2/ 1																								8												
0/ -1																								4												
-2/ -3																								1												
-4/ -5																								1												
TOTAL		.3	.5	.9	1.0	2.3	4.3	5.9	7.7	8.8	9.2	9.3	8.9	8.4	7.9	7.6	7.5					19967		19962												
																					19962			19962												

Element (X)	$\Sigma x^2$	$\Sigma x$	$\bar{x}$	$s_x$	No. Obs.	Mean No. of Hours with Temperature						
						$\leq 0^\circ\text{F}$	$\leq 32^\circ\text{F}$	$\leq 67^\circ\text{F}$	$\leq 73^\circ\text{F}$	$\leq 80^\circ\text{F}$	$\leq 93^\circ\text{F}$	Total
Rel Hum	13507881	455595	22.8	12.482	19962							
Dry Bulb	124749511	1860019	78.1	11.983	19967			603.6	489.3	341.2	92.6	744
Wet Bulb	6195776	1106324	55.4	5.646	19962			11.7	.1			744
Dew Point	2434417	476147	33.9	3.512	19962		.2	324.4				744

REVISED EDITIONS OF THIS FORM ARE OBSOLETE

0-26.5 (OL A)

USAFETAC

## PSYCHROMETRIC SUMMARY

JUN  
MONTH

ALL  
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. V.B.	Dry Bulb	Wet Bulb	Dew Point															
118/117																		.0	4	4																
116/115																		.1	13	13																
114/113																		.3	61	61																
112/111																		.6	113	113																
110/109																		1.1	209	209																
108/107																		2.0	372	372																
106/105																	.0	2.6	502	502																
104/103																	.1	3.2	621	621																
102/101														.0	.0	.0	.1	3.6	719	719																
100/ 99														.0	.1	.2	.3	4.4	956	956																
98/ 97														.0	.1	.4	.5	4.3	1004	1005																
96/ 95											.0	.1	.2	.3	.5	.5	.6	3.7	976	976																
94/ 93										.0	.0	.1	.2	.3	.4	.5	1.2	2.7	999	999																
92/ 91										.0	.1	.2	.3	.6	.8	1.2	2.1	1014	1014																	
90/ 89									.0	.1	.2	.3	.5	.8	1.4	1.6	1.2	1153	1156																	
88/ 87							.0	.0	.1	.1	.3	.4	.6	1.0	1.5	1.2	.3	1079	1080																	
86/ 85							.0	.0	.2	.2	.4	.4	.6	1.3	1.6	.6	.1	1075	1077																	
84/ 83						.0	.0	.1	.2	.3	.4	.7	1.1	1.3	1.1	.2	.0	1014	1016																	
82/ 81					.0	.0	.1	.1	.2	.3	.3	1.0	1.4	.3	.4	.1		1049	1050																	
80/ 79				.0	.1	.1	.1	.2	.4	.6	.8	1.2	1.6	.9	.1			1063	1063																	
78/ 77			.0	.0	.1	.2	.1	.1	.2	.4	1.0	1.5	1.1	.4	.0			930	931	2																
76/ 75			.0	.0	.0	.1	.0	.2	.3	.7	1.2	1.2	.5	.1				864	864	40																
74/ 73	.0	.0	.0	.0	.1	.1	.1	.1	.3	.9	1.2	.9	.3					756	756	194																
72/ 71	.0	.0	.0	.0	.0	.1	.2	.6	1.0	1.0	.5	.0						675	675	497	5															
70/ 69	.0	.0	.0	.0	.0	.1	.2	.7	.8	.8	.2	.0						587	587	1064	20															
68/ 67		.0	.1	.0	.0	.2	.4	.7	.8	.3	.0							463	463	1409	48															
66/ 65		.0	.0	.0	.0	.1	.4	.7	.4	.0								329	329	1879	68															
64/ 63		.0	.0	.0	.0	.1	.4	.4	.4	.0								200	200	2176	152															
62/ 61	.0				.0	.1	.2	.2	.0									128	128	2343	201															
60/ 59			.0	.0	.0	.1	.2	.1	.0									80	80	2430	234															
58/ 57				.0	.0	.0	.1	.0										34	34	2093	304															
56/ 55					.0	.0	.0	.0										7	7	1738	402															
54/ 53					.0	.0	.0											6	6	1310	515															
52/ 51																				883	551															
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			n			No. Obs.			Mean No. of Hours with Temperature																				
Rel Hum.																≤ 0 F	≥ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total														
Dry Bulb																																				
Wet Bulb																																				
Dew Point																																				





## PSYCHROMETRIC SUMMARY

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-46, 51-72

Jul

MONTH

**YEARS**

PAGE 1

ALL

HOURS (L, S, T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19	20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point														
118/117																			0	4	4														
116/115																			1	26	26														
114/113																			2	68	68														
112/111																			3	169	169														
110/109																			1,8	366	367														
108/107																			3,2	645	645														
106/105																			4,2	964	964														
104/103																			3,9	1174	1174														
102/101																			1,4	1229	1230														
100/99																			1,6	1269	1269														
98/97																			1,1	1226	1226														
96/95																			6	1332	1332														
94/93																			4	1332	1332														
92/91																			3	1313	1313														
90/89																			1	1537	1538														
88/87																			0	1405	1405														
86/85																			0	1419	1419	1													
84/83																			0	1172	1172	2													
82/81																			0	1002	1002	12													
80/79																			0	822	822	29													
78/77																			0	599	599	294													
76/75																			0	395	395	2													
74/73																			0	214	214	2													
72/71																			0	95	95	131													
70/69																			0	47	47	413													
68/67																			0	23	23	3859													
66/65																			0	11	11	713													
64/63																			0	1	1	1050													
62/61																			0	1	1	1512													
60/59																			0	1	1	1834													
58/57																			0	1	1	2073													
56/55																			0	1	1	1876													
54/53																			0	1	1	1591													
52																																			

## PSYCHROMETRIC SUMMARY

42-46, 51-72

JUL  
MONTH

PAGE 2

ALL  
HOURS (L. S. T.)

[illegible]





## PSYCHROMETRIC SUMMARY

SEP

MONTH

ALL  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
112/111																		0	5	5				
110/109																		1	18	18				
108/107																		6	118	118				
106/105																		0	259	259				
104/103																		0	428	428				
102/101																		0	541	541				
100/99																		0	699	700				
98/97																		0	778	778				
96/95																		0	871	871				
94/93																		0	888	888				
92/91																		0	989	989				
90/89																		0	1047	1047				
88/87																		0	1032	1032				
86/85																		0	1084	1084				
84/83																		0	1109	1109				
82/81																		0	1121	1121				
80/79																		0	1287	1287				
78/77																		0	1185	1185				
76/75																		0	1167	1167				
74/73																		0	975	975				
72/71																		0	882	882				
70/69																		0	696	697				
68/67																		0	541	543				
66/65																		0	387	387				
64/63																		0	225	225				
62/61																		0	158	158				
60/59																		0	111	112				
58/57																		0	48	48				
56/55																		0	24	24				
54/53																		0	6	6				
52/51																		0	3	3				
50/49																		0	1	1				
48/47																								
46/45																								
Element (X)	$\Sigma X^2$			$\Sigma X$			$\bar{X}$			<														



## PSYCHROMETRIC SUMMARY

42-46, 51-71

OCT

PAGE 1

ALL

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
106/105																		0	3					
104/103																		0	1					
102/101																		0	6					
100/99														0	0		0	2	53	53				
98/97														0	0		2	3	117	117				
96/95												0	0	0	0		2	5	241	241				
94/93												0	0	1	2		5	6	363	363				
92/91												0	0	1	2		6	3	429	429				
90/89														4	6		8	3	613	613				
88/87									0	0		1	1	2	4		6	1	709	709				
86/85								0	0		1	1	3	6	7	1	7	2	753	753				
84/83								0	1		1	3	5	8	10		4	1	746	746				
82/81			0				0	1	1		3	5	8	10	9		5		847	847				
80/79			0	0	0		1	1	1		4	7	10	8	7		4	1	864	864				
78/77				0		1	1	2	3		6	9	8	9	4		2	0	870	870	1			
76/75		0	0		1	1	2	3	6		9	10	9	6	3		1		975	976	11			
74/73	0	0	1	1	1	3	5	8	9		10	7	4	2	0				978	978	34			
72/71		0	1	1	2	5	8	10	11		10	6	2	1	0				1101	1102	108			
70/69	0	1	2	2	4	7	9	12	12		8	5	2	0					1212	1212	249			
68/67	0	2	2	2	5	8	11	12	12		7	2	1	0					1238	1238	528			
66/65	0	2	2	5	6	10	13	13	13		4	1	0						1254	1254	991			
64/63		1	3	4	5	10	12	12	6		2	1							1106	1106	1365			
62/61	0	2	3	4	7	10	13	11	5		1	0							1068	1068	1774			
60/59		2	3	4	7	12	15	8	2		1	0							1056	1056	2291			
58/57	0	3	2	4	7	12	11	4	1		1								862	862	2089			
56/55	0	2	3	3	8	9	6	2	1		0								656	656	2010			
54/53	0	1	1	3	6	5	4	1	0										446	446	1750			
52/51		0	2	3	3	2	2	1	0										264	264	1605			
50/49	0	0	1	3	2	3	1	0											210	210	1449			
48/47		1	2	2	1	0	0	0											126	126	1240			
46/45																								



## PSYCHROMETRIC SUMMARY

42-46, 51-71

  OCT    
MONTH

PAGE 2 ALL  
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS NAME ARE OBSOLETE

0.26-5 (OL-A)

**USAFETAC**

## PSYCHROMETRIC SUMMARY

NOV  
MONTH

ALL  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
94/ 93																.0	.0		1	1				
90/ 89																.0	.0	.0	9	9				
88/ 87																.1	.1		35	35				
86/ 85											.0	.0	.1	.2	.2	.0		98	98					
84/ 83										.0	.0	.0	.2	.3	.2	.0	.0	164	164					
82/ 81										.0	.0	.1	.5	.4	.2	.0		237	237					
80/ 79										.0	.2	.5	.8	.5	.1	.0		384	384					
78/ 77								.0	.0	.1	.1	.4	.8	.6	.3	.1	.0	439	439					
76/ 75					.0	.0	.0	.1	.1	.3	.9	.7	.5	.2	.0			506	506					
74/ 73					.0	.0	.1	.2	.3	.7	.9	.7	.4	.1	.0			632	632					
72/ 71				.0	.0	.1	.2	.3	.4	.9	.7	.6	.2	.0				638	638					
70/ 69			.0	.0	.1	.1	.2	.5	.9	1.0	.9	.3	.1	.0				760	760					
68/ 67			.0	.1	.2	.2	.4	.7	1.0	.8	.5	.2	.0					752	752	1				
66/ 65		.0	.1	.2	.2	.5	.7	.8	1.1	.7	.3	.1	.0					881	881	24				
64/ 63		.0	.2	.3	.3	.6	.9	1.1	.9	.7	.3	.0						961	961	44				
62/ 61		.1	.3	.3	.5	.8	1.1	1.2	1.0	.4	.1	.0						1057	1057	204				
60/ 59	.0	.2	.5	.5	.8	1.1	1.4	1.3	.7	.2	.1							1230	1230	476				
58/ 57	.0	.3	.6	.6	.8	1.3	1.7	1.2	.5	.1	.0							1304	1304	924				
56/ 55	.0	.4	.6	.7	1.1	1.6	1.5	.9	.3	.0								1320	1320	1369				
54/ 53	.0	.3	.7	.8	1.4	1.5	1.2	.6	.2	.0								1253	1253	1617				
52/ 51	.0	.4	.7	1.1	1.6	1.5	.8	.3	.2									1208	1208	1750				
50/ 49	.1	.3	.8	1.5	1.9	1.3	.7	.3	.0									1234	1234	1828				
48/ 47	.0	.3	.9	1.3	1.3	.6	.3	.1	.0									870	870	1792				
46/ 45	.0	.4	.8	1.2	1.0	.7	.2	.1										779	779	1974				
44/ 43	.0	.3	.7	.9	.7	.3	.1											537	537	1775				
42/ 41		.3	.5	.7	.6	.2	.0											425	425	1486				
40/ 39	.0	.2	.5	.6	.3	.0	.0											305	305	1089				
38/ 37	.0	.2	.3	.2	.1	.0	.0											153	153	828				
36/ 35		.2	.2	.1	.0	.0												89	89	579				
34/ 33		.1	.1	.0	.0													39	39	333				
32/ 31	.0	.1	.0	.0														18	18	162				
30/ 29		.0																3	3	48				
28/ 27																				12				
26/ 25																				6				
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			σ <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature								
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total		
Dry Bulb																								
Wet Bulb																								
Dew Point																								





## PSYCHROMETRIC SUMMARY

DEC

STATION

STATION NAME

YFARS

MONTH

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

JAN  
MONTH

PAGE 1 COOC-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

JAN

STATION

STATION NAME

YEARS

MONTH

PAGE 2

0000-0202  
HOURS (L. S. T.)

FORM 0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/VAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

YEARS

JAN  
MONTH

PAGE 1 0300-0500  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
62/ 61																		2	2		
58/ 57		.5	.2	.1		.1	.1	.2	.1	.1								31	31		
56/ 55		1.0	.3	.2	.2	.1	.1	.2										53	53	19	6
54/ 53	.0	1.0	.1	.5	.5	.2	.4	.2	.0									73	73	29	23
52/ 51		.5	1.0	1.2	.5	.7	.5	.3	.2									117	117	30	28
50/ 49	.1	.9	1.5	1.1	1.0	.8	1.0		.1									155	155	29	25
48/ 47	.1	1.4	1.3	2.7	1.5	1.2	.5	.1										214	214	87	21
46/ 45	.2	2.2	3.2	3.5	2.0	1.9	.3											321	321	130	53
44/ 43	.2	2.4	3.0	2.5	2.6	1.2	.1	.0										287	287	160	86
42/ 41	.1	2.4	3.2	2.5	2.3	.8	.2											284	284	279	102
40/ 39	.4	2.9	3.7	2.2	2.0	.5												280	280	302	160
38/ 37	.2	2.2	2.3	2.5	1.0	.5												211	211	341	161
36/ 35	.1	2.2	1.3	1.6	.7	.2												148	148	313	217
34/ 33	.1	.9	1.7	1.5	.7	.0												118	118	241	191
32/ 31	.0	.9	.4	.5	.1	.2												52	52	157	203
30/ 29	.1	.3	.1	1.0	.1													39	39	138	175
28/ 27			.2	.4	.1													15	15	72	125
26/ 25				.2														4	4	29	155
24/ 23			.0															1	1	30	160
22/ 21																				12	127
20/ 19																				7	101
18/ 17																					62
16/ 15																					43
14/ 13																					37
12/ 11																					34
10/ 9																					26
8/ 7																					24
6/ 5																					21
4/ 3																					17
2/ 1																					5
0/ -1																					8
-2/ -3																					1
-4/ -5																					3
-6/ -7																					2
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature										Total
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F					Total
Dry Bulb																					
Wet Bulb																					
Dew Point																					



## PSYCHROMETRIC SUMMARY:

YEARS

PAGE 2

0300-0500  
HOURS (L. S. T.)

USAFETAC  
FORM 0-26.5 (OLA)  
MAY 64  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE



## PSYCHROMETRIC SUMMARY

JAN  
MONTH

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]

USAFETAC  
FORM  
JUL 64  
0-26.5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

JAN

STATION

STATION NAME

YEARS

MONTH

PAGE 1 0900-1100

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point												
76/ 75											.0							1	1													
74/ 73											.0							1	1													
72/ 71										.1	.1	.0						5	5													
70/ 69									.1	.1	.1	.0	.0					10	10													
68/ 67							.0		.1	.1	.2	.1	.0					12	12													
66/ 65				.0	.1	.1		.3	.3	.3	.3	.0						42	42													
64/ 63				.1	.0	.2	.4	.5	.7	.7	.7	.1						61	61													
62/ 61		.0	.2	.2	.0	.6	.8	.7	.9	.7	.7	.1						102	102													
60/ 59		.1	.5	.0	.5	.9	1.2	1.3	1.3	.5	.0							152	152	4												
58/ 57		.3	.3	.5	1.0	1.6	1.4	2.1	.3	.1	.0							197	197	13												
56/ 55		.8	.3	1.0	1.7	1.4	1.8	1.9	.4	.1								226	226	37												
54/ 53	.1	.5	.5	1.5	2.5	2.3	2.5	.8	.5	.1								272	272	51												
52/ 51		.4	1.0	2.0	1.8	1.6	2.0	.7	.1									232	232	95												
50/ 49	.0	.8	1.2	2.4	2.3	1.4	1.3	.6	.3									245	245	171												
48/ 47	.2	.8	1.7	2.1	1.7	1.8	.6	.3	.1									223	223	250												
46/ 45	.1	.9	1.6	1.7	1.5	1.3	.6	.3										193	193	327												
44/ 43	.0	.7	1.3	1.3	1.4	.8	.4											141	141	353												
42/ 41	.1	.3	1.3	1.0	1.4	.6	.1	.1										113	118	311												
40/ 39	.1	.2	.8	.6	.5	.3	.1											63	63	239												
38/ 37		.2	.4	.4	.2	.3	.2											38	38	191												
36/ 35	.0	.2	.3	.3	.3	.2	.0											32	32	139												
34/ 33		.1	.0	.1	.3	.1												15	15	100												
32/ 31				.2	.0	.0												7	7	47												
30/ 29				.1	.1													5	5	19												
28/ 27				.0														1	1	19												
26/ 25																				19												
24/ 23																				7												
22/ 21																				2												
20/ 19																																
18/ 17																																
16/ 15																																
14/ 13																																
12/ 11																																
10/ 9																																
Element (X)	Σ x²			Σ x			x̄			σ <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																
Ref. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total										
Dry Bulb																																
Wet Bulb																																
Dew Point																																

## PSYCHROMETRIC SUMMARY

42-46, 52-72

JAN  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. T.)

[illegible]

USAFETAC  
FORM  
NLS 64  
0.26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-46, 52-72

**JAN**

PAGE 1 1200-1400  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
82/ 81													.1	.0	.0				4	4				
80/ 79													.1	.1	.1				9	9				
78/ 77													.1	.1	.1				10	10				
76/ 75										.1	.1	.2	.4	.2	.1	.0			29	29				
74/ 73										.0	.2	.3	.7	.6	.8	.1			66	66				
72/ 71								.1	.2	.5	1.2	.8	1.3	.3					105	105				
70/ 69					.1	.2	.2	.4	1.0	1.6	2.0	.7	.2						153	153				
68/ 67				.0	.2	.1	.3	1.2	1.7	2.0	1.7	.4							185	185				
66/ 65				.1	.1	.2	.7	2.3	2.4	2.8	1.3	.2							245	245				
64/ 63			.0	.2	.4	.9	1.0	1.9	2.9	2.5	.7	.2							257	257	1			
62/ 61		.1	.3	.2	.6	1.1	1.7	2.2	3.1	1.5	.6	.1							284	284	6			
60/ 59			.2	.2	.8	1.3	1.5	2.0	1.9	.8	.1								222	222	31			
58/ 57		.2	.4	.3	.7	1.7	1.8	1.4	1.2	.4	.2								200	200	35			
56/ 55		.4	.4	.7	1.0	1.4	1.1	1.2	.9	.9	.0								187	187	105			
54/ 53		.3	.5	.8	1.0	.9	1.1	.7	1.0	.2									154	154	210			
52/ 51	.0	.3	.2	.4	1.0	.8	.7	.6	.7										111	111	304			
50/ 49	.0	.2	.4	.5	.3	.5	.5	.4	.2										75	75	396			
48/ 47		.6	.3	.3	.4	.2	.1	.2											54	54	414			
46/ 45		.2		.2	.2	.1	.0	.1											18	18	339			
44/ 43			.1	.0			.2	.2											13	13	196			
42/ 41			.0			.0	.3	.1											13	13	142			
40/ 39						.0	.1	.1											6	6	87			
38/ 37						.0													1	1	73			
36/ 35																					26			
34/ 33																					8			
32/ 31																					8			
30/ 29																					14			
28/ 27																					6			
26/ 25																								
24/ 23																								
22/ 21																								
20/ 19																								
18/ 17																								
16/ 15																								
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			s <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature								
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total		
Dry Bulb																								
Wet Bulb																								
Dew Point																								

## PSYCHROMETRIC SUMMARY

JAN

STATION

STATION NAME

YEARS

**MONTH**

PAGE 2      1200-1400  
HOURS (L. S. T.)

[illegible]

0.26-5 (QLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (OL A)

**USAFETAC**





## PSYCHROMETRIC SUMMARY

YEARS

**JAN**  
**MONTH**

PAGE 2 1500-1700  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY<sup>1</sup>

JAN  
MONTH

STATION

STATION NAME

YEARS

**MONTH**

1800-2000  
HOURS (L. S. T.)

HOURS (L. S. T.)

[illegible]

0-26.5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM 0-26-5 (OLA)

## PSYCHROMETRIC SUMMARY

JAN  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	* 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
10/ 9																					26
9/ 7																					18
6/ 5																					20
4/ 3																					13
2/ 1																					9
0/ -1																					5
-2/ -3																					4
-4/ -5																					2
-6/ -7																					2
-8/ -9																					1
-10/-11																					1
TOTAL		4.6	7.6	11.5	13.2	16.4	16.9	14.2	8.8	4.8	1.0	.3	.0					2397		2397	
																		2397		2397	
											</										

USAFETAC FORM 0.26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

**42-46, 52-72**

JAN  
MONTH

PAGE 1 2100-2300  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	> 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point													
66 / 65										.0								1	2															
64 / 63				.0		.1	.1	.0	.2									12	12															
62 / 61			.1		.1	.3	.2	.1	.2	.0								23	23															
60 / 59		.4	.3	.0	.2	.6	.3	.4	.3	.1	.0							61	61	1														
58 / 57		.4	.3	.3	.9	.7	.8	.8	.5									116	116	14	3													
56 / 55		.7	.4	1.4	1.7	1.5	1.2	.8	.1	.0								191	191	23	18													
54 / 53	.0	.8	.8	1.6	2.1	1.8	2.0	.9	.0									238	238	28	23													
52 / 51	.2	.6	1.2	2.3	2.2	2.1	1.7	.5	.1									262	262	68	21													
50 / 49	.0	1.5	2.0	3.1	2.5	3.2	1.7	.3	.1									344	344	124	30													
48 / 47		1.5	2.2	2.4	2.4	2.6	.6	.4										287	287	192	51													
46 / 45	.1	1.6	2.5	2.3	2.5	1.5	.5	.3										272	272	304	84													
44 / 43	.3	1.2	2.8	1.4	1.0	.7	.5	.1										188	188	311	136													
42 / 41	.0	1.3	2.0	1.0	1.1	.9	.3											158	158	343	150													
40 / 39		.8	1.2	.9	.7	.7	.2											107	107	347	190													
38 / 37		.5	.6	.5	.5	.4												60	60	234	214													
36 / 35	.0	.4	.3	.2	.4	.1	.0											35	35	152	202													
34 / 33		.2		.1	.4	.3	.0											24	24	96	146													
32 / 31		.0		.3	.1													10	10	64	166													
30 / 29				.0	.0													2	2	46	176													
28 / 27																				17	148													
26 / 25																				15	135													
24 / 23																				11	121													
22 / 21																				1	89													
20 / 19																					47													
18 / 17																					38													
16 / 15																					33													
14 / 13																					27													
12 / 11																					32													
10 / 9																					33													
8 / 7																					22													
6 / 5																					19													
4 / 3																					6													
2 / 1			</																															

## PSYCHROMETRIC SUMMARY

YEARS

JAN  
MONTH

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
-2/-3																					5		
-4/-5																					3		
-6/-7																					1		
-8/-9																					5		
TOTAL	.8	11.8	16.6	17.7	18.9	17.4	10.2	4.8	1.5	.2	.0							2391	2391	2391			
																		2391		2391			
Element (X)	Σ x²	Σ x	X̄	sₓ	No. Obs.	Mean No. of Hours with Temperature						Total											
Rel. Hum.	8574156	134848	56.420	132	2391	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total											
Dry Bulb	5725789	116111	48.6	6.042	2391		.8					93											
Wet Bulb	4227847	99583	41.6	5.797	2391		6.0					93											
Dew Point	2757578	77000	32.2	10.782	2391	.9	43.7					93											

USAFETAC  
FORM  
JUL 64  
0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

YEARS

**MONTH**

HOURS (L, S, T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
70/ 69											.0							1	1					
68/ 67											.0							1	1					
66/ 65							.0	.1	.1	.1	.2							10	10					
64/ 63					.0	.5	.1	.1	.4	.0								26	26					
62/ 61				.2	.1	.3	.3	.4	.7	.5	.1							58	58					
60/ 59			.1	.7	.7	.1	.7	.7	.7	.4								88	88					
58/ 57		.2	.5	1.4	1.3	.7	1.3	.7	.6	.0								144	144					
56/ 55		.8	.9	.8	.9	1.4	1.5	1.5	.3									172	172	20	1			
54/ 53		.5	.8	.7	1.5	1.9	2.3	1.0	.1									190	190	74	19			
52/ 51		.9	.8	1.2	1.9	1.7	1.4	.7	.2									189	189	83	21			
50/ 49	.0	1.7	1.7	2.9	2.7	2.1	1.0	1.2	.0									287	287	104	58			
48/ 47		.9	1.4	1.9	2.0	1.5	1.3	.5										203	203	165	79			
46/ 45	.3	1.3	1.4	2.4	1.8	1.1	1.0	.3										204	204	222	96			
44/ 43		1.1	1.5	1.7	1.8	1.4	.6	.1										172	172	292	87			
42/ 41	.1	.7	.9	1.6	1.5	.9	.2											129	129	279	77			
40/ 39	.2	.9	1.2	1.4	1.0	1.2	.1											128	128	229	117			
38/ 37		.6	.7	.9	.6	.2												64	64	183	139			
36/ 35	.1	.2	.6	.5	.5	.1												40	40	194	178			
34/ 33		.2	.3	.3	.1													20	20	125	143			
32/ 31		.0	.1	.2														7	7	84	172			
30/ 29			.1															2	2	33	130			
28/ 27																				22	127			
26/ 25																				5	118			
24/ 23																					128			
22/ 21																					93			
20/ 19																					49			
18/ 17																					60			
16/ 15																					50			
14/ 13																					60			
12/ 11																					41			
10/ 9																					37			
8/ 7																					22			
6/ 5																					14			
4/ 3																					8			
Element (X)	Σ X <sup>2</sup>			Σ X		X̄		σ <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.												≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																								
Wet Bulb																								
Dew Point																								

## PSYCHROMETRIC SUMMARY

FEB  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
2/ 1																					4			
0/ -1																					4			
-6/ -7																					3			
TOTAL	.8	10.0	13.2	14.9	18.3	15.2	11.8	7.3	3.2	1.3	.1							2135		2135				
																		2135		2135				
			</																					

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE





## PSYCHROMETRIC SUMMARY

F E B

STATION

STATION NAME

YEARS

**MONTH**

0300-0500

HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 52-72

FEB

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0600-0800

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
62/ 61					.0	.0	.1	.2	.0	.1								13	13						
60/ 59				.1	.1	.2	.2	.1	.1	.0								20	20						
58/ 57		.2	.0	.4	.3	.3	.3	.3	.2	.1								46	46						
56/ 55		.5	.4	.7	.5	.3	.9	.5	.2									88	88	6	5				
54/ 53	.0	.7	1.4	.7	.4	.7	.7	.6	.1									111	111	22	7				
52/ 51	.1	.7	2.0	1.0	1.1	1.2	1.3	.0										159	159	48	14				
50/ 49		1.2	1.3	1.5	1.5	1.7	1.0	.1										179	179	85	29				
48/ 47		1.7	1.3	2.3	2.3	1.8	.6	.1										217	217	108	47				
46/ 45	.2	1.7	1.5	3.6	2.0	1.5	.9	.1										242	242	121	99				
44/ 43	.1	1.4	3.3	2.7	1.4	1.3	.5	.1										230	230	173	88				
42/ 41	.2	1.3	2.9	2.6	1.2	1.7	.2											218	218	239	84				
40/ 39	.1	1.6	3.0	1.6	1.8	1.0	.0											198	198	304	77				
38/ 37	.1	1.3	1.6	2.0	1.6	.5												156	156	251	102				
36/ 35	.1	.9	2.2	1.4	1.1	.0	.1											125	125	221	174				
34/ 33	.0	.8	1.3	.7	.4	.0												70	70	164	197				
32/ 31	.0	.3	.6	.4	.2													32	32	179	190				
30/ 29	.0	.2	.4	.3														21	21	117	173				
28/ 27		.1	.1															4	4	54	107				
26/ 25		.0	.3															7	7	27	123				
24/ 23																				16	141				
22/ 21																				1	104				
20/ 19																					61				
18/ 17																					62				
16/ 15																					59				
14/ 13																					59				
12/ 11																					48				
10/ 9																					23				
8/ 7																					31				
6/ 5																					12				
4/ 3																					9				
2/ 1																					5				
0/ -1																					2				
-4/ -5																					3				
-6/ -7																					1				
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature							Total							
Rel. Hum.											≤ 0 F	≤ 32 F	≤ 67 F	≥ 73 F	≥ 80 F	≥ 93 F			Total						
Dry Bulb																									
Wet Bulb																									
Dew Point																									

## PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

YEARS

MONTH

PAGE 2

0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY:

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-46, 52-72

FEB

PAGE 1 0900-1100  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

**FEB**  
**MONTH**

PAGE 2      0900-1100  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

**YEARS**

FER  
MONTH

PAGE 1 1200-1400  
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

A

710

(c)

b.5

0-20

9

W20

10

U

TA

34

ISA

5

—

## PSYCHROMETRIC SUMMARY

42-46, 52-72

FEB

PAGE 2 1200-1400  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

FE2

PAGE 1 1500-1700  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

YEARS

FEB  
MONTH

[illegible]

## PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000  
HOURS (L., S., T.)

[illegible]

## PSYCHROMETRIC SUMMARY

FEB  
MONTH

PAGE 2      1800-2000  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

FEB

PAGE 1 2100-2300  
HOURS (L. S. T.)

[illegible]

**PSYCHROMETRIC SUMMARY:**

FEB  
MONTH

PAGE 2      2100-2300  
HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 1 0000-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

STATION

STATION NAME

YEARS

**MONTH**

PAGE 2

0000-0200  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING ~~NA-Gr~~  
USAF ETAC  
AIR WEATHER SERVICE/ AC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-45, 52-72

MAR

STATION

STATION NAME

YEARS

MONTH

PAGE 1 0300-0500  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
72/ 71											.0							1	1				
70/ 69							.0		.0		.0	.1						5	5				
68/ 67						.0	.1	.1	.2	.3	.1							10	10				
66/ 65						.0	.1	.2	.3	.3	.3							19	19				
64/ 63				.0	.1	.0	.1	.3	.5	.2	.0							33	33				
62/ 61			.0	.0	.1	.1	.4	.7	.6	.3	.0							56	56				
60/ 59		.1	.1	.2	.6	.6	.7	.9	1.0	.2								99	99				
58/ 57		.2	.2	.6	.7	1.3	1.3	1.3	.3	.1								140	140	7	3		
56/ 55		.3	.6	.9	1.3	1.3	2.1	1.1	.3	.0								203	203	17			
54/ 53		.6	1.4	2.5	2.5	2.2	.9	.4										247	247	28	13		
52/ 51		.5	1.3	2.1	2.5	2.0	.3	.3										270	270	59	8		
50/ 49		1.0	2.3	2.1	2.6	2.3	1.6	.1	.1									291	291	133	29		
48/ 47		1.2	1.7	2.1	2.5	2.5	.6	.3										255	255	241	53		
46/ 45	.1	1.3	1.3	1.6	2.1	2.2	.6	.2										219	219	320	80		
44/ 43	.2	1.0	1.3	1.6	1.4	1.0	.2	.0										166	166	343	122		
42/ 41	.0	1.0	1.3	1.1	1.2	.6	.1											130	130	306	137		
40/ 39	.1	1.0	1.0	.9	1.0	.2												93	93	290	166		
38/ 37		.4	.7	.3	.3	.2												46	46	234	145		
36/ 35		.1	.2	.3	.1	.1												19	19	159	175		
34/ 33				.1	.1													4	4	95	217		
32/ 31		.1		.1														4	4	41	191		
30/ 29		.0																1	1	26	179		
28/ 27																				7	163		
26/ 25																				5	132		
24/ 23																					138		
22/ 21																					109		
20/ 19																					54		
18/ 17																					61		
16/ 15																					45		
14/ 13																					23		
12/ 11																					23		
10/ 9																					12		
8/ 7																					16		
6/ 5																					7		
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$	$\sigma_x$	No. Obs.		Mean No. of Hours with Temperature							Total							
Rel. Hum.									≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F									
Dry Bulb																							
Wet Bulb																							
Dew Point																							



## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 2 0300-0500  
HOURS (L. S. T.)

[illegible]

USAFETAC  
FORM  
JUL 64  
0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

### PSYCHROMETRIC SUMMARY:

MAR

STATION

STATION NAME

YEARS

**MONTH**

PAGE 1

0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 1 0900-1100  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
86/ 85																.0	.0		2	2															
84/ 83																.1			2	2															
82/ 81																.1			10	10															
80/ 79																.1	.0		17	17															
78/ 77											.0	.1	.0	.4	.3				33	33															
76/ 75										.0	.0	.8	1.0	.7		.0			62	62															
74/ 73									.1	.2	.6	.6	1.1	.4				72	72																
72/ 71								.1	.2	.8	1.3	1.7	1.3	.3	.0			128	128																
70/ 69				.0		.1	.2	.7	1.0	1.9	2.0	.8	.3					163	166																
68/ 67						.2	.6	1.3	1.7	1.8	1.2	.7						173	173																
66/ 65					.1	.3	1.1	1.6	2.6	1.8	.6	.4						196	196																
64/ 63					.2	1.1	1.4	2.0	1.5	1.6	.8	.1						206	206	1															
62/ 61			.0	.2	.4	1.4	1.5	2.1	2.0	.9	.4							211	211	1															
60/ 59		.1	.2	.6	.8	1.5	1.7	2.4	1.7	.7	.1	.1						233	233	17															
58/ 57		.1	.1	.5	1.3	1.6	1.7	1.4	1.4	.3	.0							197	197	58															
56/ 55		.1	.3	.9	.9	1.6	1.9	1.4	.5	.2								179	179	150															
54/ 53	.0		.7	.8	.7	1.4	1.1	.9	.3	.1								140	140	241															
52/ 51		.1	.5	.6	.8	.6	.8	.4	.4									97	97	339															
50/ 49		.2	.6	.4	.8	.5	.5	.1	.1									80	80	349															
48/ 47		.3	.0	.6	.9	.1	.2	.1										56	56	340															
46/ 45		.3	.1	.4	.3	.1	.1											31	31	292															
44/ 43		.2	.1	.1		.1	.1											13	13	223															
42/ 41		.1	.1	.1														6	6	153															
40/ 39		.0		.0														2	2	76															
38/ 37			.0			.0												2	2	45															
36/ 35		.0																1	1	20															
34/ 33																				7															
32/ 31																				2															
30/ 29																																			
28/ 27																				1															
26/ 25																																			
24/ 23																																			
22/ 21																																			
20/ 19																																			
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			s <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																			
Rel. Hum.																≤ 0 F	≤ 32 F	≤ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total													
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			

0-26.5 (01-A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0.26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 1

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	>31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point													
92/ 91																.2	.3	.1	3	3														
90/ 89																.4	.3	.2	14	14														
88/ 87															.0	.4	.6	.1	28	28														
86/ 85													.2	.2	.8	.4	.1	41	41															
84/ 83												.2	.7	1.4	1.1	.3	.2	91	91															
82/ 81										.1	.2	.6	1.1	1.6	.9	.1		105	105															
80/ 79										.2	.2	1.1	2.1	2.1	.4	.0		142	142															
78/ 77									.2	.3	1.1	2.6	2.8	1.0	.2			187	187															
76/ 75								.0	.4	1.0	1.3	2.2	2.0	.9	.1			183	183															
74/ 73								.1	.6	1.3	1.9	2.6	1.6	.4	.0			197	197															
72/ 71							.2	.3	1.3	1.9	1.9	1.7	.8	.3				192	192															
70/ 69						.0	.3	1.0	1.3	1.2	1.4	1.6	.6	.0				175	175															
68/ 67					.0	.2	.2	1.1	1.3	.9	1.4	1.0	.2					146	146															
66/ 65				.1	.0	.1	.8	1.0	1.6	1.8	1.5	.5	.0					171	171															
64/ 63				.1	.1	.3	1.1	.6	1.4	1.4	.8	.3	.0					140	140		4													
62/ 61			.1	.3	.3	1.0	.5	1.3	1.4	1.1	.5	.1						147	147	34														
60/ 59		.1	.1	.1	.1	.7	.8	.8	.7	.6	.3							110	110	106														
58/ 57			.3	.4	.6	.4	.5	.6	.3	.3								81	81	244	2													
56/ 55		.2	.1	.3	.5	.5	.3	.5	.3	.3								66	66	339	7													
54/ 53		.1	.3	.3	.2	.2	.0	.2	.1	.0								33	33	374	12													
52/ 51			.3	.5	.2	.1	.1		.0									27	27	335	27													
50/ 49		.1	.3	.1	.1	.3		.0										17	17	264	29													
48/ 47		.1	.1	.2		.0												12	12	240	45													
46/ 45			.0															1	1	192	87													
44/ 43			.0															1	1	88	133													
42/ 41																				58	168													
40/ 39																				25	149													
38/ 37																				5	164													
36/ 35																				2	158													
34/ 33																					174													
32/ 31																					193													
30/ 29																																		

### PSYCHROMETRIC SUMMARY:

442

YEARS

MONTH

1200-1400

HOURS (1 - 5 - 7)

[illegible]

## PSYCHROMETRIC SUMMARY

MAR

STATION

STATION NAME

YEARS

MOYIN

PAGE 1

1500-1700

MOU95 (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-45, 52-72

MAR  
1961

PAGE 2      1500-1700  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

PAGE 1

1800-2000  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111  
STATIC

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-45, 52-72

MAR  
MONTH

PAGE 2

1800-2000  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0.26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

MAR

PAGE 1 2100-2300  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 9-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

MAR  
MONTH

PAGE 2      2100-2300  
HOURS (L. S. T.)

[illegible]

FORM 0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

## PSYCHROMETRIC SUMMARY

YEARS

PAGE 1

6000-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

APR  
MONTH

PAGE 2 6000-0200  
HOURS (L. S. T.)

[illegible]

0.26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC





## PSYCHROMETRIC SUMMARY

APR  
MONTH

PAGE 2 0300-0500  
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point													
8 / 7																						6												
6 / 5																						5												
<del>8 / 7</del>																						<del>1</del>												
TOTAL		2.2	4.7	6.2	11.7	18.9	21.0	15.5	10.5	4.9	2.2	1.1						<del>1.0</del>	2366	2366	2366													
																		2366		2366	2366													
Element (X)	Zx'	Zx	X̄	σ <sub>x</sub>	No. Obs.	Mean No. of Hours with Temperature							Total																					
Rel. Hum.	4893742	100644	42.5	16.094	2366	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total																						
Dry Bulb	7702643	134091	56.7	6.604	2366			5.9	.6	<del>1.6</del>		90																						
Wet Bulb	4993322	108096	45.7	4.897	2366							90																						
Dew Point	2593074	77094	32.6	8.749	2366		45.2					90																						

USAFETAC FORM 0-26-5 (OLA) REvised PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

APR

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0600-0800

HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

APR  
MONTH

0600-0800  
HOURS (L. S. T.)

[illegible]

0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

## PSYCHROMETRIC SUMMARY

APR  
MONTH

PAGE 1 0900-1100  
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OLA)

USAFETAC

## PSYCHROMETRIC SUMMARY

42-46, 51-72

APR  
MONTH

PAGE 2 C900-1100  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-46, 51-72

APR  
MONTH

PAGE 1 1200-1400  
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26.5 (OLA)

USAFETAC

## PSYCHROMETRIC SUMMARY

<u>23111</u>	<u>LUKE AFB ARIZONA/PHOENIX</u>
STATION	STATION NAME

42-46, 51-72

APR

PAGE 2

1200-1400  
HOURS (L. S. T.)

## PSYCHROMETRIC SUMMARY:

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

APR

STATION

STATION NAME

YEARS

**MONTH**

PAGE 1 1500-1700  
HOURS (L. S. T.)

HOURS (L, S, T.)

[illegible]









## PSYCHROMETRIC SUMMARY

APR

PAGE 1 2100-2300  
HOURS (L. S. T.)

[illegible]0-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM 0-26-5 (OLA)



## PSYCHROMETRIC SUMMARY

    MAY      
MONTH

STATION

STATION NAME

YFARS

MONTH

0000-0200

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point													
92/ 91																	.1	2	2															
90/ 89																.1	.1	.1	7	7														
88/ 87															.0	.2	.2		12	12														
86/ 85											.0	.1	.1	.5	.5	.2	.2		36	36														
84/ 83											.0	.1	.5	.7	.6	.2			49	49														
82/ 81								.0	.1	.1	.0	.1	1.4	.6	.2	.2			69	69														
80/ 79									.0	.3	.4	1.2	1.4	1.4	.7			131	131															
78/ 77							.0		.3	.5	.9	2.1	2.6	1.2	.1			194	194															
76/ 75				.0	.0	.0	.1	.3	1.1	2.3	3.9	2.2	.3					261	261															
74/ 73			.0	.0	.0	.1	.2	.6	1.5	3.3	3.5	1.4	.1					268	268															
72/ 71				.0	.0	.1	.3	.4	1.4	2.2	2.8	2.2	.3	.1				243	243															
70/ 69				.0	.1	.1	1.1	1.4	3.2	2.9	1.2	.2						254	254	1														
68/ 67			.1	.0	.0	.2	.4	.6	2.3	3.2	1.8							226	226	3														
66/ 65			.0	.0	.1	.4	.9	2.9	2.2	.8	.4	.2						198	198	5	1													
64/ 63		.0	.0	.2	.2	.5	.8	1.5	1.5	1.4	.5							164	164	15	1													
62/ 61			.0	.0	.5	1.0	1.0	1.4	.9	.1								125	125	41	4													
60/ 59			.0		.2	.4	.8	1.0	.8	.3								90	90	120	7													
58/ 57		.1	.1	.2	.4	.7	.6	.8	.0									73	73	210	2													
56/ 55		.2	.3	.1	.1	.3	.4	.4	.2									51	51	344	10													
54/ 53		.1	.0	.0	.1	.2	.3	.2	.0									26	26	452	22													
52/ 51		.1	.0		.1	.1	.1	.0										13	13	471	30													
50/ 49					.0		.1	.0										4	4	340	42													
48/ 47							.0	.0										2	2	217	65													
46/ 45							.0											1	1	153	72													
44/ 43																				78	95													
42/ 41																				33	104													
40/ 39																				10	178													
38/ 37																				3	223													
36/ 35																				2	216													
34/ 33																				1	252													
32/ 31																					250													
30/ 29																					219													
28/ 27																					182													
26/ 25																					139													
Element (X)	Σ x²			Σ x			Σ			Σ x			No. Obs.			Mean No. of Hours with Temperature																		
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total												
Dry Bulb																																		
Wet Bulb																																		
Dew Point																																		













## PSYCHROMETRIC SUMMARY

MAY

HOURS (L, S, T, J)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 52-72

MAY  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OLA)  
REVISED: PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

MAY

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1200-1400  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL											
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point												
112/111																		.0	1	1													
110/109																		.1	3	3													
108/107																		.4	10	10													
106/105																		.2	6	6													
104/103																	.0	1.0	27	27													
102/101																		1.8	46	46													
100/ 99																	.0	.1	3.1	80	80												
98/ 97																	.1	.4	4.8	132	132												
96/ 95																	.1	.6	7.3	208	210												
94/ 93																	.7	.6	7.5	257	257												
92/ 91																	.6	2.6	7.5	293	293												
90/ 89																	.6	2.1	4.2	294	294												
88/ 87																	.9	2.3	3.3	210	210												
86/ 85										.0	.1	.1	.6	1.8	2.7	2.6	.9	2.7	2.6	208	208												
84/ 83									.0	.1	.2	.5	1.3	2.3	1.1	.2	.2	1.5	1.2	154	154												
82/ 81									.2	.9	1.8	1.4	1.0	.3	.1		.1	1.2	.3	128	128												
80/ 79									.0	.6	1.1	1.0	1.3	.7	.1			.7	.1	119	119												
78/ 77									.0	.1	.6	1.1	.9	.9	.2			.9	.2	95	95												
76/ 75									.2	.4	.6	.9	.6	.3				.6	.2	82	82												
74/ 73								.0	.0	.2	.4	.4	.2	.2				.2	.2	41	41												
72/ 71								.1	.2	.5	.6	.1	.2					.2	.2	40	40												
70/ 69						.0	.1	.2	.2	.2	.2	.1	.0					.2	.2	26	26												
68/ 67					.0	.0	.1	.2	.2	.2	.1	.1						.2	.2	16	16												
66/ 65					.1	.0	.0	.1	.2	.1	.0							.1	.0	8	8												
64/ 63					.0	.0			.0	.1								.0	.0	3	3												
62/ 61			.0		.0			.0	.0									.0	.0	4	4												
60/ 59				.0	.0													.0	.0	2	2												
58/ 57				.0														.0	.0	1	1												
56/ 55			.0															.0	.0	1	1												
54/ 53																		.0	.0														
52/ 51																		.0	.0														
50/ 49																		.0	.0														
48/ 47																		.0	.0														
46/ 45																		.0	.0														
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			n			No. Obs.			Mean No. of Hours with Temperature																	
Rel. Hum.													≤ 0 F			≤ 32 F			≥ 67 F			≥ 73 F			≥ 80 F			≥ 93 F			Total		
Dry Bulb																																	
Wet Bulb																																	
Dew Point																																	







### PSYCHROMETRIC SUMMARY:

MAY  
MONTH

PAGE 2 1500-1700  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
44/ 43																																	73		
42/ 41																																	98		
40/ 39																																	143		
38/ 37																																	213		
36/ 35																																	238		
34/ 33																																	300		
32/ 31																																	291		
30/ 29																																	252		
28/ 27																																	165		
26/ 25																																	151		
24/ 23																																	106		
22/ 21																																	82		
20/ 19																																	37		
18/ 17																																	41		
16/ 15																																	30		
14/ 13																																	30		
12/ 11																																	16		
10/ 9																																	3		
8/ 7																																	12		
6/ 5																																	2		
4/ 3																																	4		
2/ 1																																	2		
0/ -1																																	1		
-2/ -3																																	1		
-4/ -7																																	1		
TOTAL				.1	.0	.2	.2	.3	.2	.5	1.1																								

0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM 0-26-5 (OLA)

## PSYCHROMETRIC SUMMARY

MAY  
MONTH

STATION

STATION NAME

YEARS

PAGE 1

1800-2000

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
110/109																		.1	2	2															
108/107																		.2	6	6															
106/105																		.2	6	6															
104/103																		.8	20	20															
102/101																		1.1	27	27															
100/99																		2.5	62	62															
98/97														.0			.0	4.2	106	106															
96/95														.0		.2	.2	5.7	155	155															
94/93														.2		1.3	5.8	188	188																
92/91													.1	.1		1.9	6.3	216	216																
90/89												.1	.0	.5	1.4	3.3	4.0	234	234																
88/87											.0	.4	1.0	2.6	5.1	1.4	266	266																	
86/85										.1	.1	.4	1.7	3.5	2.9	.7	235	235																	
84/83								.0	.2	.8	1.2	2.0	2.8	1.0	.2	193	194																		
82/81							.1	.2	.7	1.4	2.6	2.0	.3	.1	182	182																			
80/79						.0	.0	.1	.3	1.2	1.6	1.9	.8	.2	155	155																			
78/77						.0	.1	.2	.6	1.2	1.3	1.0	.2	.0	112	112																			
76/75						.0	.2	.7	1.2	1.3	.6	.1			105	105																			
74/73						.2	.2	.7	.6	.2					62	62																			
72/71					.0	.1	.1	.4	.4	.6	.3				52	52	1																		
70/69			.0		.0	.1	.1	.3	.4	.2	.1				42	42	5																		
68/67				.1	.1	.1	.1	.1	.2	.2	.1				21	21	31																		
66/65				.0	.1	.2	.2	.1	.2	.2	.0				25	25	80																		
64/63					.1	.0	.0	.0	.0	.0	.0				10	10	237																		
62/61			.1	.0	.0	.0	.0	.0							7	7	373																		
60/59			.1	.0	.0	.0	.0								4	4	519																		
58/57			.1	.0											3	3	479																		
56/55																	341	9																	
54/53		.0														1	1	212	18																
52/51																		123	16																
50/49																		67	37																
48/47																		23	38																
46/45																		5	58																
44/43																		1	95																
Element (X)	$\Sigma X^2$	$\Sigma X$	$\bar{X}$	$\sigma_x$	No. Obs.	Mean No. of Hours with Temperature																													
Rel. Hum.						≤ 0 F	≤ 32 F	≥																											

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

MAY

PAGE 2 1800-2000  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point	
42/ 41																									98	
40/ 39																										149
38/ 37																										193
36/ 35																										260
34/ 33																										284
32/ 31																										291
30/ 29																										265
28/ 27																										170
26/ 25																										161
24/ 23																										111
22/ 21																										77
20/ 19																										45
18/ 17																										34
16/ 15																										20
14/ 13																										14
12/ 11																										15
10/ 9																										10
8/ 7																										4
6/ 5																										12
4/ 3																										3
2/ 1																										3
0/ -1																										2
TOTAL		.0	.3	.1	.4	.4	.4	.6	1.1	2.0	3.8	6.6	8.8	11.9	13.9	16.3	33.3	2497	2497	2497		2497	2497	2497		
Element (X)	Σ x <sup>2</sup>		Σ x		x̄		s <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature															
Rel. Hum.	833636		40208		16.1		8.637		2497		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 92 F	Total									
Dry Bulb	18682948		213020		86.1		8.364		2498				91.1	86.9	73.7	21.3	93									
Wet Bulb	8517357		145489		58.3		4.021		2497				1.4				93									
Dew Point	282697		81287		32.6		8.361		2497		.1	46.1					93									

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/TAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

4AY  
MONTH

PAGE 1 2100-2300  
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point			
98/ 97																	.1	2	2					
96/ 95																	.2	5	5					
94/ 93																	.7	18	18					
92/ 91															.1	.1	.4	24	24					
90/ 89														.0	.8	1.4	.3	64	64					
88/ 87												.0	.1	.3	1.1	1.0	.2	70	70					
86/ 85											.0	.4	.4	1.4	2.1	1.2	.0	138	138					
84/ 83										.0	.3	.5	1.0	2.4	2.5	.4	.0	182	182					
82/ 81									.0	.0	.8	1.0	2.7	4.0	1.4	.4	.0	254	254					
80/ 79							.0	.2	.2	.3	2.2	4.4	4.4	4.1	.6	.1	.0	309	309					
78/ 77						.1	.1	.1	.3	.1	1.3	2.8	4.3	1.8	.2	.0		292	292					
76/ 75						.2	.2	.2	.2	.1	2.1	3.2	2.8	.4	.0			242	242					
74/ 73						.0	.1	.1	.7	1.2	2.4	2.6	1.2	.2				210	210					
72/ 71				.0	.0	.0	.0	.2	.6	1.2	2.3	2.2	.3					177	177					
70/ 69				.0	.1	.1	.2	.3	.8	1.1	2.0	1.3	.3	.0				197	197					
68/ 67				.1	.0	.2	.3	1.0	1.4	1.3	.5	.0						123	123					
66/ 65			.0	.0	.1	.1	.1	.3	.3	1.0	.6	.1						86	86	10				
64/ 63			.0	.0	.1	.1	.2	.4	.3	.6	.1							53	53	48	1			
62/ 61			.1	.1	.2	.2	.3	.3	.4	.1								44	44	139	4			
60/ 59		.1	.2	.1	.0	.1	.1	.1	.0	.0								17	17	235	2			
58/ 57		.1	.1	.1	.0	.0	.1	.0	.0	.0								11	11	402	4			
56/ 55	.1	.0				.1	.0	.0	.0	.0								7	7	491	13			
54/ 53	.1	.0			.0	.0	.0	.0	.0	.0								6	6	454	18			
52/ 51	.1	.0				.0	.0	.0	.0	.0								3	3	342	26			
50/ 49																				187	41			
48/ 47																				118	51			
46/ 45																				43	72			
44/ 43																				14	79			
42/ 41																				4	120			
40/ 39																				2	195			
38/ 37																				1	208			
36/ 35																					225			
34/ 33																					251			
32/ 31																					240			
Element (X)	Σ x <sup>2</sup>		Σ x		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total	
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F						
Dry Bulb																								
Wet Bulb																								
Dew Point																								

## PSYCHROMETRIC SUMMARY

MAY  
MONTH

2100-2300  
HOURS (L. S. T.)

## PSYCHROMETRIC SUMMARY

JUN

**MONTH**

HOURS (L, S, T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-72

    JUN      
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (QLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

YEARS

JUN  
MONTH

PAGE 1 0300-0500  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

JUN

YEARS

MONTH

PAGE 2 0300-0500  
HOURS (L. S. T.)

USAFETAC  
FORM  
JUL 64  
0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0600-0800

HOURS (L - S - T -)

[illegible]

## PSYCHROMETRIC SUMMARY

JUN

**MONTH**

HOURS (L, S, T, )

USAFETAC  
FORM 0.26-5 (OL A)  
JUL 64  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

42-46, 51-72

JUN

STATION

STATION NAME

YEARS

**MONTH**

PAGE 1

0900-1100  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL D.B./W.B.	TOTAL											
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point														
106/105																		6	14	14														
104/103																		8	21	21														
102/101																		1	61	61														
100/ 99																		3	95	95														
98/ 97																		1	151	151														
96/ 95																		3	190	190														
94/ 93																		3	238	238														
92/ 91																		3	269	269														
90/ 89																		1	287	287														
88/ 87																		3	234	234														
86/ 85																		1	207	207														
84/ 83																		1	154	154														
82/ 81																			143	144														
80/ 79																			119	119														
78/ 77																			79	80														
76/ 75																			59	59	5													
74/ 73																			33	33	36													
72/ 71																			14	14	65													
70/ 69																			5	5	142													
68/ 67																			4	4	179													
66/ 65																			1	1	255													
64/ 63																			1	1	333													
62/ 61																					372													
60/ 59																					424													
58/ 57																					335													
56/ 55																					157													
54/ 53																					64													
52/ 51																					11													
50/ 49																					1													
48/ 47																																		
46/ 45																																		
44/ 43																																		
42/ 41																																		
40/ 39																																		
Element (X)	Σ X <sup>2</sup>				Σ X				X̄				σ <sub>x</sub>				No. Obs.				Mean No. of Hours with Temperature													
Rel. Hum.																					≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb																																		
Wet Bulb																																		
Dew Point																																		

## PSYCHROMETRIC SUMMARY

YEARS

JUN  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. T.)

## PSYCHROMETRIC SUMMARY

YEARS

**MONTH**

HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OLA)  
JUL 64  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

JUN

YEARS

MONTH

PAGE 2 1200-1400  
HOURS (L. S. T.)

USAFETAC FORM 0-26.5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-72

JUN

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1500-1700  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb			Wet Bulb	Dew Point		
118/117																		2	4		4			
116/115																		4	10		10			
114/113																		8	44		44			
112/111																		0	72		72			
110/109																		2	123		123			
108/107																		7	183		183			
106/105																		2	241		241			
104/103																		1	232		232			
102/101																		4	234		234			
100/ 99																		4	322		322			
98/ 97																		1	226		227			
96/ 95																		1	159		159			
94/ 93																		3	125		125			
92/ 91																		1	105		105			
90/ 89																		8	112		113			
88/ 87																		1	84		85			
86/ 85																		3	48		48			
84/ 83																		2	28		28			
82/ 81																		2	13		13			
80/ 79																		1	13		13			
78/ 77																			2		2	1		
76/ 75																			1		1	17		
74/ 73																			2		2	52		
72/ 71																						148		
70/ 69																			1		1	240		
68/ 67																						338		
66/ 65																						427		
64/ 63																						408		
62/ 61																						355		
60/ 59																						263		
58/ 57																						105		
56/ 55																						27		
54/ 53																						2		
52/ 51																						71		
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature													
Ref. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F			
Dry Bulb																					Total			
Wet Bulb																								
Dew Point																								

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISI PREVIOUS EDITIONS OF THE FORM ARE OBSOLETE





## PSYCHROMETRIC SUMMARY

**YEARS**

JUN  
MONTH

PAGE 1 1800-2000  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point													
116/115																		0	1	1														
114/113																		4	9	9														
112/111																		7	17	17														
110/109																		3	32	32														
108/107																		6	86	86														
106/105																		9	117	117														
104/103																		2	151	151														
102/101																		1	198	198														
100/ 99																		4	273	243														
98/ 97																		7	269	269														
96/ 95																		2	239	239														
94/ 93																		5	236	236														
92/ 91																		8	181	181														
90/ 89																		1	176	176														
88/ 87																		7	121	121														
86/ 85																		1	96	96														
84/ 83																		2	78	78														
82/ 81																		3	57	57														
80/ 79																		0	36	36														
78/ 77																		2	19	19														
76/ 75																			9	9	3													
74/ 73																			5	5	32													
72/ 71																			4	4	86													
70/ 69																			3	3	208													
68/ 67																			1	1	236													
66/ 65																					5													
64/ 63																					8													
62/ 61																					24													
60/ 59																					17													
58/ 57																					30													
56/ 55																					37													
54/ 53																					51													
52/ 51																					66													
50/ 49																					95													
Element (X)	$\Sigma x^2$	$\Sigma x$	$\bar{x}$	$s_x$	No. Obs.	Mean No. of Hours with Temperature																												
Rel. Hum.						≤ 0 F	≤																											

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46, 51-72  
YEARS

JUN  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point		
48/ 47																					83		
46/ 45																					121		
44/ 43																					165		
42/ 41																					173		
40/ 39																					194		
38/ 37																					222		
36/ 35																					212		
34/ 33																					193		
32/ 31																					185		
30/ 29																					126		
28/ 27																					91		
26/ 25																					82		
24/ 23																					54		
22/ 21																					48		
20/ 19																					14		
18/ 17																					29		
16/ 15																					20		
14/ 13																					13		
12/ 11																					8		
10/ 9																					3		
8/ 7																					7		
6/ 5																					1		
4/ 3																					1		
0/ -1																					1		
TOTAL				.0	.0	.3	.2	.5	.2	.3	.4	.5	1.5	3.7	6.5	9.5	11.0	65.7	2384	2384	2384		
																			2384		2384		
Element (X)	ΣX²			ΣX		X̄		sₓ		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.	041003			34959		14.7		7.339		2384		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb	21829646			227416		95.4		7.550		2384				90.0	89.7	88.0	60.3	90					
Wet Bulb	3589136			150846		63.3		4.319		2384				21.3	1.3			90					
Dew Point	3631743			89951		37.7		9.989		2384		.0	25.8	.2				90					



## PSYCHROMETRIC SUMMARY

JUN  
MONTH

PAGE 2 2100-2300  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

JUL

STATION

STATION NAME

YEARS

**MONTH**

PAGE 1 0000-0200

HOJPS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point														
102/101																		0	1	1															
100/99														.0		.1	.1	0	6	6															
98/97														.2		.1	.2	1	16	16															
96/95											.0	.1	.7	1.1	.4	.3	.1	67	67																
94/93											.4	.8	1.7	.7	.7	.4	.2	118	118																
92/91								.0	.1	.4	1.1	3.2	2.2	1.3	.6	.5	.4	255	255																
90/89								.0	1.0	2.3	4.9	2.9	2.0	1.4	1.1	.3	.2	391	392																
88/87							.1	.7	2.3	3.1	2.8	1.6	1.7	1.2	1.0	.2	.0	366	366																
86/85						.2	.8	2.3	3.1	1.8	2.0	1.6	1.1	1.2	.8	.3	.0	372	372																
84/83				.0	.2	.6	1.2	2.7	1.6	.8	.9	1.0	.9	1.0	.5	.0	.0	281	281																
82/81				.0	.9	1.6	1.5	1.4	.5	.4	.1	.3	.7	.4	.1			202	202																
80/79				.7	1.3	1.2	.6	.2	.1	.5	.1	.3	.2	.9				138	138																
78/77		.0	.7	.6	.8	.2	.1	.0	.1	.2	.4	.3	.2	.1				96	96	4															
76/75		.2	.9	1.0	.2	.1	.0	.0	.0	.2	.2	.2	.1					80	80	32															
74/73		.4	.5	.1	.0			.0	.2	.3	.0	.0	.0					40	40	202															
72/71		.1		.0					.1	.2		.0						12	12	481															
70/69																				616															
68/67																				304															
66/65																				215															
64/63																				158															
62/61																				141															
60/59																				119															
58/57																				91															
56/55																				50															
54/53																				23															
52/51																				3															
50/49																				2															
48/47																																			
46/45																																			
44/43																																			
42/41																																			
40/39																																			
38/37																																			
36/35																																			
Element (X)	Σx²	Σx	Σ	Σ	Σ	No. Obs.																													

## PSYCHROMETRIC SUMMARY

YEARS

JUL  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-72

JUL

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0300-0500  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

YEARS

\_\_\_\_ JUL \_\_\_\_  
MONTH

PAGE 2 0300-0500  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

JUL

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
96/ 95																		14	14					
94/ 93																		61	61					
92/ 91																		118	118					
90/ 89																		233	233					
88/ 87																		327	327					
86/ 85																		376	376					
84/ 83																		354	354					
82/ 81																		343	343					
80/ 79																		256	256					
78/ 77																		173	173	6				
76/ 75																		122	122	58				
74/ 73																		55	55	24				
72/ 71																		29	29	72				
70/ 69																		14	14	167				
68/ 67																		13	13	197				
66/ 65																		2	2	237				
64/ 63																				291				
62/ 61																				259				
60/ 59																				223				
58/ 57																				156				
56/ 55																				133				
54/ 53																				106				
52/ 51																				102				
50/ 49																				88				
48/ 47																				71				
46/ 45																				65				
44/ 43																				51				
42/ 41																				64				
40/ 39																				44				
38/ 37																				36				
36/ 35																				29				
34/ 33																				22				
32/ 31																				24				
30/ 29																				11				
Element (X)	Σ X <sup>2</sup>			Σ X			X̄		σ <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb																								
Wet Bulb																								
Dew Point																								

## PSYCHROMETRIC SUMMARY

JUL.

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

JUL  
MONTH

PAGE 1 0900-1100  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point				
108/107																	.0	1	1						
106/105																	.0	20	20						
104/103																	.0	37	37						
102/101														.2	.2	.8	.8	109	110						
100/99												.3	.6	1.1	2.4	1.3	2.3	201	201						
98/97											.0	.7	2.8	2.7	2.2	1.6	2.6	313	313						
96/95										.1	1.0	3.2	3.8	2.5	1.7	1.9	1.9	386	386						
94/93									.3	1.0	2.8	4.6	2.9	1.9	1.2	1.3	1.0	421	421						
92/91								.2	.7	2.5	3.7	2.2	1.1	1.0	.6	.6	.7	341	341						
90/89								.7	1.7	2.7	1.9	1.1	.3	.6	.8	.6	.2	262	262						
88/87						.0	.6	1.0	1.6	1.3	.6	.2	.4	.4	.4	.1		169	169						
86/85					.0	.5	.8	1.0	.4	.2	.1		.0	.2	.1			82	82						
84/83					.2	.4	1.1	.2	.1			.0	.1	.1	.0			56	56						
82/81			.0	.1	.2	.7	.3	.1				.0	.1	.1	.0			37	37						
80/79			.0	.4	.4	.3						.0	.1					27	27						
78/77			.2	.1	.0	.0												10	10	58					
76/75			.2	.0														7	7	215	2				
74/73		.0	.1	.0														4	4	537	13				
72/71																				627	63				
70/69																				388	105				
68/67																				234	188				
66/65																				157	240				
64/63																				120	267				
62/61																				90	289				
60/59																				44	251				
58/57																				12	177				
56/55																				1	143				
54/53																					114				
52/51																					87				
50/49																					100				
48/47																					63				
46/45																					81				
44/43																					65				
42/41																					56				
Element (X)	$\Sigma x^2$			$\Sigma x$			$\bar{x}$			$\sigma_x$			No. Obs.			Mean No. of Hours with Temperature									
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total			
Dry Bulb																									
Wet Bulb																									
Dew Point																									

## PSYCHROMETRIC SUMMARY

JUL

[illegible]

USAFETAC FORM 0.26-5 (OL-A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE  
JUL 64

## PSYCHROMETRIC SUMMARY

42-46, 51-72

JUL  
MONTH

PAGE 1 1200-1400  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

YEARS

JUL  
MONTH

PAGE 2 1200-1400  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-72

JUL  
MONTH

PAGE 1 1500-1700  
HOURS (L. S. T.)

[illegible]





## PSYCHROMETRIC SUMMARY

JCL

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1800-2000

HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

JUL

MONIN

HOURS (L. S. T.)

[illegible]





## PSYCHROMETRIC SUMMARY

AUG  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE  
K11 A4

## PSYCHROMETRIC SUMMARY

YEARS

0300-0500  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

42-46551-71

AUG

PAGE 2 0300-0500  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	> 31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point	
28 / 27																					2	
26 / 23																					2	
22 / 21																					1	
TOTAL	1.4	2.0	5.8	8.2	10.0	12.5	15.1	14.6	13.2	8.2	5.0	3.2	1.2	.2	.2		.0		2410		2410	
																		2410		2410		

## PSYCHROMETRIC SUMMARY

**AUG**

MONTH

060000800  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B. W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
96/ 95																		2	2																
94/ 93																		9	9																
92/ 91																		33	33																
90/ 89																		90	90																
88/ 87																		200	200																
86/ 85																		266	266																
84/ 83																		356	356																
82/ 81																		378	378																
80/ 79																		327	327																
78/ 77																		309	309																
76/ 75																		209	209	94	8														
74/ 73																		99	99	355	45														
72/ 71																		48	48	587	157														
70/ 69																		35	35	516	275														
68/ 67																		12	12	304	333														
66/ 65																		12	12	189	334														
64/ 63																		5	5	109	288														
62/ 61																		4	4	68	228														
60/ 59																		1	1	69	192														
58/ 57																				38	109														
56/ 55																				39	87														
54/ 53																				18	63														
52/ 51																				7	57														
50/ 49																				3	61														
48/ 47																				4	34														
46/ 45																				1	32														
44/ 43																				1	26														
42/ 41																					30														
40/ 39																					19														
38/ 37																					7														
36/ 35																					11														
34/ 33																					6														
32/ 31																					2														
28/ 27																					1														
Element (X)	Σx <sup>2</sup>			Σx			X̄			s <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																			
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total													
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			

## PSYCHROMETRIC SUMMARY

YEARS

**PAGE 2**

0600-0800  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

4204651071

YEARS

AUG  
MONTH

PAGE 1

1900-1100  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point					
106/105																						3	3		
104/103																						3	3		
102/101																						3	3		
100/99																						3	3		
98/97																						3	3		
96/95																						3	3		
94/93																						3	3		
92/91																						3	3		
90/89																						3	3		
88/87																						3	3		
86/85																						3	3		
84/83																						3	3		
82/81																						3	3		
80/79																						3	3		
78/77																						3	3		
76/75																						3	3		
74/73																						3	3		
72/71																						3	3		
70/69																						3	3		
68/67																						3	3		
66/65																						3	3		
64/63																						3	3		
62/61																						3	3		
60/59																						3	3		
58/57																						3	3		
56/55																						3	3		
54/53																						3	3		
52/51																						3	3		
50/49																						3	3		
48/47																						3	3		
46/45																						3	3		
44/43																						3	3		
42/41																						3	3		
40/39																						3	3		
Element (X)	Σ X <sup>2</sup>		Σ X		X̄		s <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature										Total				
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total		
Dry Bulb																									
Wet Bulb																									
Dew Point																									

## PSYCHROMETRIC SUMMARY

AUG

PAGE 2 0900-1100  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0.26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

YEARS

MONTH

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL		TOTAL										
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point												
114/113																		1	1														
112/111																		4	4														
110/109																		11	11														
108/107																		56	56														
106/105																		132	132														
104/103																		212	212														
102/101																		296	297														
100/99																		401	402														
98/97																		366	366														
96/95																		322	322														
94/93																		203	203														
92/91																		150	150														
90/89																		108	108														
88/87																		58	58														
86/85																		30	30														
84/83																		20	20														
82/81																		15	15														
80/79																		8	8														
78/77																		12	12														
76/75																		2	2														
74/73																		2	2														
72/71																		1	1														
70/69																		4	4														
68/67																																	
66/65																																	
64/63																																	
62/61																																	
60/59																																	
58/57																																	
56/55																																	
54/53																																	
52/51																																	
50/49																																	
48/47																																	
Element (X)	Σ x <sup>2</sup>			Σ x			x̄			σ <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																	
Rel. Hum.													≤ 0 F			≤ 32 F			≥ 67 F			≥ 73 F			≥ 80 F			≥ 93 F			Total		
Dry Bulb																																	
Wet Bulb																																	
Dew Point																																	

## PSYCHROMETRIC SUMMARY

.42-46, 51-71

AUG  
MONTH

PAGE 2 1200-1400  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

PAGE 1 1500-1700  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
116/115																				1	2	2		
114/113																				2	4	4		
112/111																				7	18	18		
110/109																				3	6	87		
108/107																				6	6	168		
106/105																				9	0	280		
104/103																				0	0	392		
102/101																				7	8	399		
100/99																				1	9	337		
98/97																				1	0	252		
96/95																				2	5	174		
94/93																				2	2	105		
92/91																				0	0	59		
90/89																				0	0	54		
88/87																				0	0	24		
86/85																				0	0	19		
84/83																				0	0	13		
82/81																				0	0	12		
80/79																				0	0	10		
78/77																				0	0	4		
76/75																				0	0	3		
74/73																				0	0	3		
72/71																				0	0	1		
70/69																				0	0	2		
68/67																				0	0			
66/65																				0	0			
64/63																				0	0			
62/61																				0	0			
60/59																				0	0			
58/57																				0	0			
56/55																				0	0			
54/53																				0	0			
52/51																				0	0			
50/49																				0	0			
Element (X)	Σ X <sup>2</sup>		Σ X		X̄		σ <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature										Total			
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F								
Dry Bulb																								
Wet Bulb																								
Dew Point																								



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

STATION

STATION NAME

YEARS

MONTH

PAGE 2 1500-1700

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point	
48/ 47																					67	
46/ 45																					55	
44/ 42																					44	
42/ 41																					32	
40/ 39																					15	
38/ 37																					22	
36/ 35																					17	
34/ 32																					15	
32/ 31																					9	
30/ 29																					1	
28/ 27																					1	
26/ 23																					1	
TOTAL	.0	.1	.2	.2	.5	.4	1.1	1.1	1.8	2.4	4.5	5.4	7.9	11.1	13.4	14.3	35.5	2416	2416	2416	2416	
Element (X)	Σx <sup>2</sup>		Σx		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.	2043241		64863		26.8		11.180		2416		≤ 0 F	≤ 32 F	> 67 F	≈ 73 F	≈ 80 F	≈ 93 F	Total					
Dry Bulb	24453087		242659		100.4		5.785		2416				93.0	92.8	92.4	85.2	93					
Wet Bulb	12752040		179374		72.9		3.011		2416				88.9	52.5	.1		93					
Dew Point	8325337		140977		58.2		7.774		2416				.5	10.3	.3		93					

## PSYCHROMETRIC SUMMARY

22111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

AUG

PAGE 1 1800-2000

HOURS (L, S, T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
114/113																		1	1																
112/111																		2	2																
110/109																		14	14																
108/107																		36	36																
106/105																		78	78																
104/103																		161	161																
102/101																		213	213																
100/99																		306	306																
98/97																		315	315																
96/95																		338	338																
94/93																		223	223																
92/91																		222	222																
90/89																		169	169																
88/87																		124	124																
86/85																		62	62																
84/83																		51	51																
82/81																		44	44																
80/79																		27	27																
78/77																		16	16	59															
76/75																		6	6	283															
74/73																		3	3	605															
72/71																		1	1	705															
70/69																		2	2	401															
68/67																		2	2	166															
66/65																				93															
64/63																				52															
62/61																				10															
60/59																				1															
58/57																				1															
56/55																																			
54/53																																			
52/51																																			
50/49																																			
48/47																																			
Element (X)	Σ X <sup>2</sup>			Σ X			X̄			σ <sub>x</sub>			No. Obs.			Mean No. of Hours with Temperature																			
Ref. Hum.																≤ 0 F	≤ 32 F	≤ 47 F	≤ 73 F	≥ 80 F	≥ 93 F	Total													
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			

## PSYCHROMETRIC SUMMARY

42-46, 51-71

AUG  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

42-46, 51-71

AUG

PAGE 1 2100-2300  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-71

     AUG       
MONTH

PAGE 2 2100-2300  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111	LUKE AFB ARIZONA/PHOENIX
STATION	STATION NAME

42-46, 51-71

SEP

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0000-0200

HOURS (L, S, T.)

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

SEP  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46,51-71

SEP  
MONTH

PAGE 1

0300-0500  
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point				
92/ 91									.0	.1	.1	.0	.0	.0				1	1						
90/ 89									.0	.1	.2	.1	.0	.0				8	8						
88/ 87							.0	.1	.2	.3	.2	.1	.0	.0				21	21						
86/ 85							.1	.3	.4	.3	.2	.2	.2	.0				42	42						
84/ 83						.1	.4	.5	.8	.9	.6	.2	.0					83	83						
82/ 81				.0	.0	.6	1.2	1.2	1.1	.7	.7	.3	.1					141	141						
80/ 79				.0	.7	1.1	1.4	1.6	1.1	1.2	1.1	.2	.0	.1				199	199						
78/ 77		.0		.5	.9	.9	1.6	1.5	1.4	1.2	.9	.1	.0	.1				213	213						
76/ 75			.2	.9	1.2	1.5	1.4	1.7	1.9	1.8	.5	.1	.0	.0				263	263	3					
74/ 73		.5	.3	1.0	1.8	.8	1.8	1.6	2.1	.9	.1	.1	.0					262	262	16	1				
72/ 71	.0	.3	1.2	1.2	1.0	.9	2.4	2.0	1.6	1.1	.1	.1	.2					285	285	104	16				
70/ 69		.4	.5	1.5	.6	1.3	1.5	1.5	1.7	.3								214	214	156	42				
68/ 67	.1	.3	.6	.5	1.2	1.5	1.5	1.4	.8	.3								190	192	221	84				
66/ 65	.1	.0	.4	.5	.8	1.4	1.7	1.1	.8	.2								164	164	261	103				
64/ 63			.2	.3	.9	.6	1.0	.4	.4	.1								92	92	203	149				
62/ 61		.1	.2	.1	.4	.6	1.3	.4	.1									77	77	248	169				
60/ 59			.0	.0	.6	.4	.6	.3	.0									49	49	276	147				
58/ 57			.0	.0	.0	.3	.2	.1										16	16	245	128				
56/ 55				.0	.0	.2	.0											8	8	195	158				
54/ 53		.0	.0	.0														3	3	181	158				
52/ 51		.1																2	2	86	168				
50/ 49																				82	171				
48/ 47																				40	168				
46/ 45																				13	152				
44/ 43																				3	128				
42/ 41																					117				
40/ 39																					92				
38/ 37																					60				
36/ 35																					47				
34/ 33																					23				
32/ 31																					14				
30/ 29																					14				
28/ 27																					6				
26/ 25																					4				
Element (X)	Σ X <sup>2</sup>			Σ X			X̄		s <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total						
Dry Bulb																									
Wet Bulb																									
Dew Point																									



## PSYCHROMETRIC SUMMARY

**23111**

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

PAGE 2 0300-0500  
HOURS (L. S. T.)

[illegible]

USAFETAC  
FORM  
JUL 64  
0-26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

SEP

YEARS

MONTH

PAGE 1 0600-0800  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																														TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point														
94/ 93														.0				2	2															
92/ 91												.0		.0			.0	2	2															
90/ 89											.1	.1	.1	.0				12	12															
88/ 87							.0	.0	.1	.2	.3	.2	.2	.1	.0			26	26															
86/ 85						.0	.3	.3	.4	.6	.3	.3	.3	.0				60	60															
84/ 83						.2	.3	.6	.6	.9	.4	.7	.3					93	93															
82/ 81					.2	.7	.9	1.2	.9	1.2	1.0	.3	.0	.1				153	153															
80/ 79					.8	1.1	1.6	1.4	1.5	1.3	1.0	.3						212	212															
78/ 77		.1	.1	.6	1.0	1.7	2.0	1.5	1.6	1.2	.8	.3	.0					255	255															
76/ 75		.0	.2	.9	1.1	1.8	1.7	2.0	1.9	1.5	.3	.1	.1	.0				275	275	7														
74/ 73		.3	.3	.9	1.7	1.4	1.5	1.8	1.6	.9	.2		.0	.0				247	247	31														
72/ 71	.0	.1	1.0	.8	1.0	.9	1.5	1.9	1.7	.6	.3	.2	.1					235	236	91														
70/ 69	.0	.5	.5	.8	.8	1.5	1.8	1.4	1.2	.5	.3	.1						222	223	163														
68/ 67	.0	.3	.4	.6	.9	1.2	1.6	1.5	.6	.2	.0							174	174	235														
66/ 65		.0	.2	.6	.8	1.1	1.7	.7	.5									129	129	259														
64/ 63		.1	.3	.5	.5	.8	.8	.6	.2									86	86	241														
62/ 61		.0	.2	.2	.3	.6	.5	.5	.0									56	56	264														
60/ 59		.0		.0	.6	.8	.5	.3										53	53	261														
58/ 57				.1	.3	.4	.3	.0										25	25	242														
56/ 55				.1	.0	.2	.1	.1										14	14	178														
54/ 53			.0				.0											2	2	146														
52/ 51		.0																1	1	89														
50/ 49		.0																1	1	71														
48/ 47																				37														
46/ 45																				14														
44/ 43																				6														
42/ 41																																		
40/ 39																				101														
38/ 37																				63														
36/ 35																				43														
34/ 33																				46														
32/ 31																				28														
30/ 29																				16														
28/ 27																				12														
																				10														
Element (X)	$\Sigma X^2$			$\Sigma X$			$\bar{X}$			$\sigma_x$			No. Obs.			Mean No. of Hours with Temperature																		
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total												
Dry Bulb																																		
Wet Bulb																																		
Dew Point																																		

U.S. GPO: 1964 O-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

SEP  
MONTH

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

SEP

PAGE 1 0900-1100  
HOURS (L. S. T.)

[illegible]

FORM 0.26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

## PSYCHROMETRIC SUMMARY

SEP  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

PAGE 1 1200-1400  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

SEP

MONTH

1200-1400  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

SEP

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1500-1700

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	> 31	Dry Bulb	Wet Bulb	Dew Point				
112/111																		.2	4	4				
110/109																		.5	12	12				
108/107														.0			.1	4.1	98	98				
106/105													.0				.3	7.1	174	174				
104/103													.0		.3	1.0	8.6	232	232					
102/101													.5	1.0	2.0	6.6	238	238						
100/ 99												.1	.4	1.2	1.8	2.4	6.8	297	297					
98/ 97												.3	.9	1.3	2.1	2.0	4.2	249	249					
96/ 95											.1	.6	1.4	1.2	1.9	1.8	2.6	224	224					
94/ 93										.0	.5	.8	1.1	1.0	1.7	2.3	2.1	221	221					
92/ 91									.0	.2	.6	.5	1.1	1.1	1.2	.7	1.1	152	152					
90/ 89								.0	.3	.7	.6	.5	.8	.8	.3	.7	.7	131	131					
88/ 87								.0	.4	.6	.7	.3	.7	.4	.4	.5	.2	100	100					
86/ 85						.1	.2	.3	.3	.4	.3	.3	.1	.1	.2	.1	.0	57	57		-2			
84/ 83						.0	.1	.3	.1	.2	.5	.2	.1	.2	.1			46	46					
82/ 81				.1	.1	.2	.1	.1		.2	.0	.0	.0	.1				23	23		2			
80/ 79				.0	.0	.1	.2	.1	.0	.1	.0		.2	.1				21	21		2			
78/ 77		.0	.0	.2	.3	.1	.1	.3		.0								31	21		9			
76/ 75				.2	.2	.1	.0	.1										14	14		65			
74/ 73			.0	.0	.0		.0	.0	.0	.0								7	7		235			
72/ 71		.1		.0			.0		.1									7	7		352			
70/ 69		.0		.1	.0													4	4		440			
68/ 67				.0														1	1		418			
66/ 65				.1														2	2		372			
64/ 63																					223			
62/ 61				.0														1	1		93			
60/ 59																					65			
58/ 57																					46			
56/ 55																					8			
54/ 53																					4			
52/ 51																								
50/ 49																								
48/ 47																								
46/ 45																								
Element (X)	Σ X <sup>2</sup>		Σ X		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ			
Rel. Hum.																								
Dry Bulb																								
Wet Bulb																								
Dew Point																								

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE



## PSYCHROMETRIC SUMMARY

42-46, 51-71

SEP  
MONTH

PAGE 2 1500-1700

[illegible]

## PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-46, 51-71

SEP  
MONTH

PAGE 1 1800-2000  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-71

SEP  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OL-A)

USAFETAC FORM JUL 64

## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

42-46, 51-71

SEP  
MONTH

YEARS

PAGE 1

2100-2300  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111	LUKE AFB ARIZONA/PHOENIX
STATION	STATION NAME

42-46, 51-71

SEP  
MONTH

PAGE 2 2100-2300  
HOURS (L. S. Y.)

[illegible]



## PSYCHROMETRIC SUMMARY

OCT  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-46, 51-71  
YEARS

OCT  
MONTH

PAGE 1 0300-0500  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point				
78/ 77								.0		.2		.0						6	6						
76/ 75					.1	.2	.1		.1	.2			.0					17	17						
74/ 73		.0	.2		.2	.2	.2	.2	.2	.3	.1	.0	.1					44	44						
72/ 71		.0	.2	.2	.4	.5	.5	.7	.5	.2	.2	.0	.0					85	85	1					
70/ 69		.2	.5	.4	.7	.9	1.0	1.0	.9	.2	.1	.0						142	142	7	2				
68/ 67	.0	.4	.2	.5	1.1	1.5	1.7	1.5	.8	.2	.2	.0						196	196	21	11				
66/ 65		.3	.5	.7	1.2	2.3	2.2	1.6	.6	.1	.1							231	231	34	17				
64/ 63		.4	.5	1.1	1.2	1.9	2.0	1.4	.5		.0							218	218	44	22				
62/ 61		.2	.6	.8	1.2	2.3	2.4	1.9	.5	.1								246	246	70	28				
60/ 59		.1	.6	1.0	2.1	2.6	4.0	1.7	.2	.0	.0							300	300	125	38				
58/ 57	.1	.4	.5	.9	1.8	3.6	3.0	1.0	.2	.1								279	279	179	42				
56/ 55		.4	.4	1.1	1.5	3.0	2.0	.5	.2									222	222	226	89				
54/ 53	.1	.5	.5	.6	1.7	1.6	1.3	.3	.1									162	162	247	102				
52/ 51		.1	.5	1.0	.8	.8	.7	.1										96	96	262	107				
50/ 49			.2	.7	.4	1.0	.5	.1										70	70	271	137				
48/ 47		.2	.5	.6	.5		.1	.0										50	50	334	149				
46/ 45		.0	.2	.3	.2	.1	.0											22	22	242	175				
44/ 43		.1	.3	.1	.0													14	14	149	175				
42/ 41		.0	.0	.1	.0													6	6	100	179				
40/ 39																				66	199				
38/ 37					.1													3	3	21	212				
36/ 35				.0	.0													2	2	6	188				
34/ 33				.0														1	1	1	151				
32/ 31																				3	117				
30/ 29																				1	81				
28/ 27																				2	59				
26/ 25																					38				
24/ 23																					20				
22/ 21																					29				
20/ 19																					15				
18/ 17																					8				
16/ 15																					6				
14/ 13																					8				
12/ 11																					3				
Element (X)	Σ x <sup>2</sup>		Σ x		x̄		s <sub>x</sub>		No. Obs.		Mean No. of Hours with Temperature								Total						
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total		
Dry Bulb																									
Wet Bulb																									
Dew Point																									



## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

42-46, 51-71

QCT  
MONTH

YEARS

PAGE 2 0300-0500  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111	LUKE AFB ARIZONA/PHOENIX
STATION	STATION NAME

42-46, 51-71

OCT  
MONTH

PAGE 1 C600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

42-46, 51-71

OCT  
MONTH

PAGE 2

0600-0800  
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE JUL 64

## PSYCHROMETRIC SUMMARY

967

YFARS

[illegible]

## PSYCHROMETRIC SUMMARY

23111

LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

CC 1

PAGE 2 0300-1100

[illegible]

0-26.5 (01-A) REUSED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OL A)

USAFETAC

USAFETAC

## PSYCHROMETRIC SUMMARY

23111      LUKE AFB ARIZONA/PHOENIX  
STATION      STATION NAME

42-46, 51-71

OCT  
MONTH

PAGE 2 1200-1400

[illegible]

## PSYCHROMETRIC SUMMARY

YEARS

ВСТ

**MONTH**

PAGE 1 1500-1700  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point			
106/105																	1	2	2					
102/101																	2	4	4					
100/99																	2	37	37					
98/97														.1	.1	.2	1.2	76	76					
95/95												.0	.2	.3	1.1	2.0	2.5	149	149					
94/93												.1	.3	.7	2.2	2.4	2.9	209	209					
92/91											.1	.4	.3	1.4	1.7	2.4	1.4	186	186					
90/89								.1		.2	.3	.5	1.1	1.7	1.9	3.3	1.8	264	264					
88/87									.1	.2	.4	.5	1.7	2.4	3.5	2.4	.4	280	280					
86/85								.1	.3	.1	.5	.9	1.9	3.1	2.3	.9	.0	242	242					
84/83						.0	.0	.2	.2	.3	.6	1.2	2.1	1.8	1.3	.2		188	188					
82/81						.0	.0	.0	.4	.5	1.0	1.7	1.6	.8	1.1	.2		179	179					
80/79						.1	.0	.1	.2	.5	.9	1.2	1.1	1.0	.3	.0		132	132					
78/77					.0	.1	.2	.4	.6	.6	.7	.8	.9	.6	.1			121	121					
76/75					.0	.2	.2	.3	.7	.4	.6	.7	.5	.4				95	95	3				
74/73				.1	.1	.0	.3	.3	.1	.2	.5	.3	.2	.0				51	51	8				
72/71			.0	.1	.1	.2	.5	.1	.2	.4	.6	.1	.1					55	55	32				
70/69		.0	.1	.1	.2	.1	.2	.3	.4	.5	.1	.0						51	51	73				
68/67		.0		.0	.2	.0	.0	.2	.2	.1								18	18	149				
66/65		.1		.1	.1	.0	.1	.0	.5	.0	.1							29	29	274				
64/63		.0	.1	.1			.0	.0	.2	.0	.1							17	17	343				
62/61		.0	.1	.1			.0	.2										12	12	410				
60/59			.1	.0														4	4	461				
58/57				.1														2	2	257				
56/55			.0							.1								3	3	146				
54/53				.1					.0									4	4	109				
52/51			.2															4	4	81				
50/49																				38				
48/47																				20				
46/45																				4				
44/43																				3				
42/41																								
40/39																								
38/37																								

USAFETAC FORM 0-26-5 (11 4) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE



## PSYCHROMETRIC SUMMARY

OCT

PAGE 2 1500-1700  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

E C T

MONTH

1800-2000

HOURS (L, S, T)

[illegible]

## PSYCHROMETRIC SUMMARY

DCT

YEARS

[illegible]

## PSYCHROMETRIC SUMMARY

  E C T    
MONTH

PAGE 2 2100-2300  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

NOV  
MONTH

PAGE 2 0000-0200  
HOURS (L. S. T.)

[illegible]







DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

NOV  
MONTH

PAGE 1 0600-0800  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15	16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31			Dry Bulb	Wet Bulb	Dew Point	
72/ 71												.1								2	2			
70/ 69								.0			.0	.1								4	4			
68/ 67					.0					.0	.1									4	4			
66/ 65			.0	.1		.0	.1			.0	.0									8	8			
64/ 63		.1		.2	.1	.1	.2	.3	.1	.0	.2									30	30	1		
62/ 61			.2	.2	.3	.2	.2	.1	.3	.0										39	39	3	1	
60/ 59		.3	.4	.5	.7	.3	.9	.2	.3	.1										69	89	6	2	
58/ 57	.0	.5	.7	.8	.4	.7	1.4	.9	.2											128	128	28	12	
56/ 55	.0	.9	.7	.7	1.0	1.4	1.1	1.0	.4											164	164	35	21	
54/ 53		.8	1.2	1.3	1.7	1.5	1.6	.8	.2											201	201	63	28	
52/ 51	.0	.7	1.1	1.5	2.5	2.6	1.0	.3	.3											229	229	88	38	
50/ 49	.3	.6	2.0	3.0	3.5	1.9	1.4	.2												296	296	94	57	
48/ 47	.1	.7	1.9	3.6	2.4	1.0	.5	.1												236	236	156	61	
46/ 45	.0	1.0	2.5	3.4	1.9	1.8	.5	.2												262	262	233	65	
44/ 43		.6	2.5	2.4	1.3	.6	.2													171	171	318	89	
42/ 41		.7	1.5	2.1	1.8	.3	.0													149	149	351	97	
40/ 39		.7	1.5	2.4	1.1	.1														132	132	248	125	
38/ 37	.1	.3	1.2	1.0	.3	.1														70	70	224	199	
36/ 35		.3	.3	.3	.1															34	34	200	215	
34/ 33		.6	.5	.1																27	27	134	211	
32/ 31	.0	.3	.1	.1																14	14	74	205	
30/ 29		.1																		2	2	28	199	
28/ 27																						5	165	
26/ 25																						2	124	
24/ 23																							115	
22/ 21																							88	
20/ 19																							49	
18/ 17																							46	
16/ 15																							24	
14/ 13																							13	
12/ 11																							8	
10/ 9																							16	
8/ 7																							6	
6/ 5																							7	
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											≤ 0 F	≤ 32 F	> 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISD PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

NOV  
MONTH

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

NOV  
MONTH

PAGE 1 0900-1100  
HOURS (L. S. T.)

USAFETAC  
FORM  
JUL 64  
0.26-5 (OL A)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

42-46, 51-71

NOV  
MONTH

PAGE 2 0900-1100  
HOURS (L. S. Y.)

[illegible]



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

# PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

NOV  
MONTH

PAGE 2 1200-1400  
HOURS (P. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL		TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point		
22/ 21																					71		
20/ 19																					49		
18/ 17																					30		
16/ 15																					30		
14/ 13																					25		
12/ 11																					16		
10/ 9																					12		
8/ 7																					12		
6/ 5																					9		
4/ 3																					4		
2/ 1																					2		
0/ -1																					1		
-2/ -3																					1		
-4/ -5																					1		
TOTAL	.0	.8	1.4	1.5	2.9	4.5	6.0	9.5	10.9	12.6	13.4	14.9	11.5	6.3	3.1	.6	.0	2288	2288	2288	2288		

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## PSYCHROMETRIC SUMMARY

23111 LUKE AFB ARIZONA/PHOENIX

42-46, 51-71

NOV  
MONTH

YEARS

PAGE 1 1500-1700  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point				
94/ 93																.0	.1	1	1						
90/ 89																.1	.0	6	6						
88/ 87															.1	.3	.5	21	21						
86/ 85											.0	.1	.4	1.0	1.1	.2		67	67						
84/ 83											.1	.1	1.0	1.5	1.1	.1	.0	90	90						
82/ 81										.1	.3	.7	2.1	1.9	1.0	.1		140	140						
80/ 79										.1	.4	1.8	3.4	1.9	.7	.1		193	193						
78/ 77							.2	.1	.3	.5	1.7	2.9	1.9	1.1	.2			205	205						
76/ 75							.2	.3	.3	1.2	2.7	1.7	1.9	.7	.2			207	207						
74/ 73						.0	.3	.4	.6	1.8	2.7	2.0	1.8	.4	.0			230	230						
72/ 71						.3	.5	.4	1.1	2.3	1.8	1.7	.5					195	195						
70/ 69					.0	.2	.5	.6	1.4	2.3	2.7	.8	.1	.1				202	202						
68/ 67				.0	.3	.4	.7	.9	1.8	1.6	1.1	.7	.2					175	175						
66/ 65			.2	.2	.2	.6	1.0	1.0	1.6	1.4	.9	.3	.1					166	166	9					
64/ 63			.2	.0	.3	.5	.4	.7	1.2	1.4	.4							119	119	21					
62/ 61					.1	.5	.5	.6	1.1	.7	.4							87	87	74	2				
60/ 59			.2	.3	.3	.2	.7	.6	.3	.1	.1							61	61	162	9				
58/ 57		.0	.1	.1	.2	.3	.5	.4	.1	.2								45	45	323	11				
56/ 55		.2	.1	.3	.3	.1	.3	.0	.0	.0								32	32	399	21				
54/ 53		.1	.2	.0	.1	.0	.1	.0										14	14	362	38				
52/ 51		.1	.1	.0	.2	.2		.0	.0									16	16	314	43				
50/ 49		.0		.1	.0		.0											5	5	264	53				
48/ 47																				160	59				
46/ 45																				118	91				
44/ 43		.1	.0															4	4	45	108				
42/ 41		.2																4	4	23	141				
40/ 39																				8	163				
38/ 37																				3	225				
36/ 35																					231				
34/ 33																					172				
32/ 31																					138				
30/ 29																					168				
28/ 27																					116				
26/ 25																					135				
Element (X)	$\Sigma X^2$		$\Sigma X$		$\bar{X}$		$\sigma_x$		No. Obs.		Mean No. of Hours with Temperature												Total		
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F					Total				
Dry Bulb																									
Wet Bulb																									
Dew Point																									



## PSYCHROMETRIC SUMMARY

NOV  
MONTH

PAGE 2 1500-1700  
HOURS (L. S. T.)

[illegible]



### PSYCHROMETRIC SUMMARY:

YEARS

NOV  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

NOV  
MONTH

PAGE 1 2100-2300  
HOURS (L. S. T.)

[illegible]

FORM 0-26.5 (01. A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM 0-26-5 (01 A)

## PSYCHROMETRIC SUMMARY

42-46, 51-71

NOV  
MONTH

PAGE 2 2100-2300  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

41-45, 52-71

DEC  
MONTH

PAGE 1 0000-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

41-45, 51-71

DEC  
MONTH

PAGE 2

0000-0200  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

DEC  
MONTH

PAGE 1 0300-0500  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

DEC  
MONTH

PAGE 2 0300-0500  
HOURS (L. S. T.)

[illegible]0-26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC FORM



## PSYCHROMETRIC SUMMARY

41-45, 51-71

DEC  
MONTH

PAGE 2 0600-0800  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

**YEARS**

DEC  
MONTH

0900-1100  
HOURS (L. S. T.)

[illegible]

0-26-5 (OLA)

UNSAFETY

## PSYCHROMETRIC SUMMARY

YEARS

DEC  
MONTH

PAGE 1 1200-1400  
HOURS (L. S. T.)

[illegible]

## PSYCHROMETRIC SUMMARY

DEC  
MONTH

PAGE 2 1200-1400  
HOURS (L. S. T.)

[illegible]

USAFETAC  
FORM  
HII 44  
0.26-5 (OLA)  
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

## PSYCHROMETRIC SUMMARY

YEARS

PAGE 1

1500-1700  
HOURS (L. S. T.)

[illegible]



## PSYCHROMETRIC SUMMARY

YEARS

DEC  
MONTH

1500-1700  
HOURS (L.S.T.)

[illegible]



## PSYCHROMETRIC SUMMARY

41-45, 52-71

DEC  
MONTH

PAGE 2 1800-2000  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point	
6/ 5																					5	
4/ 3																					2	
0/ -1																					1	
TOTAL	.3	5.1	9.2	12.1	15.5	21.5	17.6	11.9	5.2	1.7	.7	.1							2410		2410	
																			2410			

## PSYCHROMETRIC SUMMARY

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 1

2100-2300  
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
70/ 69									.0									1	1																
68/ 67							.0											1	1																
66/ 65						.1	.1			.1	.0		.0					9	9																
64/ 63						.0	.0	.0	.1	.0	.0	.0						7	7																
62/ 61				.2	.2	.2	.1	.2	.0									19	19																
60/ 59			.2	.4	.4	.5	.5	.1	.2									54	54																
58/ 57		.2	.5	.2	.3	.8	.8	.4	.2	.1								82	82	9															
56/ 55		.6	.4	.7	1.2	1.6	1.2	.5	.5									159	159	14															
54/ 53	.1	.8	1.0	1.4	1.8	2.7	.6	.7	.4									230	230	46															
52/ 51	.2	1.1	2.1	1.2	2.9	3.2	1.2	.4	.0									293	293	67															
50/ 49	.2	1.4	1.9	2.3	3.0	3.4	1.2	.4	.1									337	337	111															
48/ 47		1.6	2.2	3.2	3.9	2.9	1.5	.1	.1									372	372	195															
46/ 45		1.7	2.4	2.7	3.0	1.5	.6	.0										284	284	254															
44/ 43		1.6	1.9	2.3	2.1	.7	.5											219	219	337															
42/ 41	.1	1.4	1.3	1.6	1.6	.7	.0											161	161	360															
40/ 39	.0	.8	.7	.9	1.2	.4												96	96	357															
38/ 37		.2	.5	.6	.5	.1												46	46	281															
36/ 35			.3	.4	.2													22	22	173															
34/ 33		.0	.3	.2	.0													15	15	99															
32/ 31					.1													2	2	64															
30/ 29																				32															
28/ 27																				8															
26/ 25																				2															
24/ 23																																			
22/ 21																																			
20/ 19																																			
18/ 17																																			
16/ 15																																			
14/ 13																																			
12/ 11																																			
10/ 9																																			
8/ 7																																			
6/ 5																																			
4/ 3																																			
Element (X)	Σ x <sup>2</sup>			Σ x			Σ	s <sup>2</sup>	No. Obs.		Mean No. of Hours with Temperature																								
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total																		
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			

## PSYCHROMETRIC SUMMARY

DEC  
MONTH

2100-2300  
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## MEANS AND STANDARD DEVIATIONS

DRY-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

23111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION		STATION NAME												YEARS
HRS (LST)		JAN	FEB	MAR	APR.	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
00-02	MEAN	45.4	49.1	53.8	61.2	70.3	78.8	86.1	83.5	76.9	64.0	52.2	45.8	64.2
	S D	6.062	6.865	6.834	6.998	7.379	6.965	5.175	5.231	6.544	6.768	6.315	5.634	15.668
	TOTAL OBS	2392	2135	2312	2366	2499	2383	2442	2414	2336	2415	2293	2406	28395
03-05	MEAN	42.9	46.0	50.1	56.7	64.9	73.2	82.0	80.1	72.9	60.5	49.4	43.2	60.3
	S D	6.207	6.799	6.452	6.604	6.857	7.137	5.063	4.946	6.560	6.679	6.423	5.875	15.075
	TOTAL OBS	2405	2136	2311	2366	2499	2382	2413	2411	2335	2412	2291	2408	28369
06-08	MEAN	41.4	44.6	49.6	57.9	67.5	76.1	83.5	81.1	73.5	60.9	48.8	41.9	60.9
	S D	6.472	6.736	6.582	7.179	7.437	7.442	5.168	5.060	6.812	7.333	6.798	6.194	16.284
	TOTAL OBS	2406	2136	2316	2366	2494	2382	2491	2410	2337	2414	2291	2413	28456
09-11	MEAN	51.3	55.7	61.7	71.0	80.7	88.9	93.3	90.6	86.3	75.0	61.6	52.6	72.7
	S D	7.222	7.386	7.947	8.153	7.727	7.029	5.187	5.408	6.781	8.061	7.761	7.176	16.553
	TOTAL OBS	2394	2134	2316	2366	2492	2382	2484	2415	2337	2411	2292	2409	28432
12-14	MEAN	61.2	65.0	70.2	78.7	88.2	96.6	100.3	97.4	94.2	83.6	70.7	62.3	81.0
	S D	7.122	7.633	8.802	9.017	7.942	7.322	5.557	5.681	6.968	8.021	7.785	7.100	15.875
	TOTAL OBS	2401	2133	2310	2364	2497	2382	2494	2416	2335	2412	2288	2411	28443
15-17	MEAN	63.7	67.7	73.1	81.4	90.7	99.8	103.7	100.4	96.6	85.3	72.0	63.8	83.5
	S D	7.305	8.136	9.212	9.261	8.127	7.334	5.467	5.785	7.277	8.262	7.893	7.249	16.264
	TOTAL OBS	2400	2129	2311	2362	2494	2386	2495	2416	2336	2414	2285	2414	28442
18-20	MEAN	53.1	60.6	67.1	75.9	86.1	95.4	99.3	95.4	89.6	75.8	61.8	54.1	76.6
	S D	6.691	7.808	8.890	8.971	8.364	7.550	6.363	6.445	7.564	7.940	6.962	5.960	17.576
	TOTAL OBS	2397	2140	2311	2362	2498	2384	2489	2416	2335	2412	2290	2410	28444
21-23	MEAN	48.6	53.0	58.9	67.0	76.6	85.7	91.4	87.9	81.1	67.6	55.2	48.5	58.8
	S D	6.042	6.822	7.404	7.384	7.267	6.957	5.617	5.720	6.702	6.962	6.180	5.353	16.496
	TOTAL OBS	2391	2144	2312	2369	2494	2385	2496	2415	2338	2417	2291	2409	28461
ALL HOURS	MEAN	51.2	55.2	60.6	66.7	75.1	86.8	92.5	89.6	83.9	71.6	59.0	51.5	71.0
	S D	10.199	10.873	11.522	11.981	11.980	11.867	9.383	9.100	11.036	11.852	11.041	10.027	18.258
	TOTAL OBS	19187	17087	18500	18921	19967	19066	19804	19313	18689	19307	18321	19280	227442

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## MEANS AND STANDARD DEVIATIONS

WET-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

23111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION		STATION NAME												YEARS											
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL											
00-02	MEAN	39.5	41.5	44.3	47.8	52.1	57.4	67.5	69.0	62.3	52.7	44.1	39.9	51.7											
	S D	5.986	6.138	5.057	4.800	4.525	5.258	4.864	4.354	5.799	6.088	5.744	5.550	11.417											
	TOTAL OBS	2393	2135	2313	2366	2499	2383	2441	2414	2338	2415	2293	2405	28395											
03-05	MEAN	37.8	39.7	42.2	45.7	49.9	55.3	66.4	68.2	60.8	51.0	42.4	38.2	49.9											
	S D	6.215	6.310	5.273	4.897	4.646	5.718	5.445	4.842	6.247	6.397	5.944	5.826	11.777											
	TOTAL OBS	2405	2136	2311	2366	2499	2382	2412	2410	2333	2412	2291	2405	28362											
06-08	MEAN	36.8	38.7	42.1	46.6	51.6	57.1	67.5	68.8	61.2	51.2	42.0	37.3	50.3											
	S D	6.421	6.318	5.360	5.179	4.839	5.696	5.233	4.732	6.249	6.480	6.083	6.114	12.400											
	TOTAL OBS	2406	2136	2316	2366	2493	2382	2490	2409	2335	2414	2291	2412	28449											
09-11	MEAN	42.7	45.1	46.2	52.7	57.2	62.1	70.3	71.5	66.1	57.6	48.9	43.7	55.7											
	S D	5.969	5.716	4.979	4.901	4.216	4.593	4.020	3.568	4.956	5.633	5.258	5.479	11.017											
	TOTAL OBS	2394	2134	2316	2366	2491	2379	2483	2415	2337	2410	2292	2409	28426											
12-14	MEAN	47.6	49.2	51.7	55.3	59.5	64.2	71.6	72.6	68.1	60.7	52.8	48.4	58.7											
	S D	5.266	5.226	4.834	4.871	4.082	4.251	3.565	3.151	4.345	5.069	4.671	4.616	9.774											
	TOTAL OBS	2401	2132	2310	2364	2495	2379	2492	2414	2334	2412	2288	2411	28432											
15-17	MEAN	48.7	50.0	52.3	55.9	60.0	64.7	71.9	72.6	68.0	60.8	53.3	49.1	59.1											
	S D	5.046	5.118	4.716	4.726	3.974	4.113	3.233	3.011	4.158	4.903	4.643	4.520	9.464											
	TOTAL OBS	2400	2127	2311	2362	2494	2383	2495	2416	2336	2414	2285	2414	28437											
18-20	MEAN	45.2	47.4	50.2	53.9	58.3	63.3	70.9	71.4	66.4	58.0	49.6	45.1	56.8											
	S D	5.462	5.477	4.814	4.637	4.021	4.319	3.220	3.214	4.522	5.341	5.221	5.023	10.323											
	TOTAL OBS	2397	2140	2311	2362	2497	2384	2489	2416	2334	2412	2290	2410	28442											
21-23	MEAN	41.6	43.9	46.9	50.5	54.7	59.9	69.0	70.0	64.0	54.6	46.0	41.7	53.8											
	S D	5.797	5.784	4.897	4.643	4.164	4.780	3.997	3.831	5.243	5.849	5.534	5.345	11.019											
	TOTAL OBS	2391	2144	2311	2369	2494	2385	2496	2415	2338	2416	2291	2409	28459											
ALL HOURS	MEAN	42.5	44.4	47.2	51.1	55.4	60.5	69.4	70.5	64.6	55.8	47.4	42.9	54.5											
	S D	7.104	7.012	6.287	6.131	5.646	5.931	4.692	4.224	5.922	6.856	6.825	6.751	11.454											
	TOTAL OBS	19187	17084	18499	18920	19962	19037	19799	19309	18685	19305	18321	19275	227403											

DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## MEANS AND STANDARD DEVIATIONS

DEW-POINT TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

23111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

STATION	STATION NAME	YEARS												
HRS (LST)		JAN	FEB	MAR.	APR	MAY	JUN.	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
00-02	MEAN	31.0	31.1	32.4	32.5	33.3	36.4	56.1	61.1	52.3	42.1	34.0	31.7	39.5
	S D	10.666	11.065	9.536	8.981	8.624	10.013	10.614	8.297	9.865	9.991	9.962	9.621	14.277
	TOTAL OBS	2393	2135	2313	2366	2499	2383	2441	2414	2338	2415	2293	2405	28395
03-05	MEAN	30.2	30.6	32.0	32.6	33.8	38.8	56.8	61.6	52.3	41.7	33.4	31.0	39.7
	S D	10.464	10.754	9.367	8.749	8.376	9.932	10.497	8.277	9.753	9.920	9.777	9.291	14.386
	TOTAL OBS	2405	2136	2311	2366	2499	2382	2412	2410	2333	2412	2291	2405	28362
06-08	MEAN	29.7	30.1	32.2	33.5	35.4	40.7	58.0	62.3	52.6	42.0	33.3	30.5	40.2
	S D	10.252	10.560	9.154	8.662	8.277	9.640	9.845	7.979	9.675	9.711	9.467	9.361	14.498
	TOTAL OBS	2406	2136	2316	2363	2493	2382	2490	2409	2335	2414	2291	2412	28449
09-11	MEAN	31.3	31.5	32.7	34.2	36.0	41.1	57.5	61.8	53.4	43.2	34.8	32.3	41.0
	S D	10.969	11.187	10.054	9.313	8.188	9.602	9.645	7.529	9.419	10.129	10.111	9.965	14.270
	TOTAL OBS	2394	2134	2316	2366	2491	2379	2483	2415	2337	2410	2292	2409	28426
12-14	MEAN	31.2	30.7	31.8	32.8	34.3	39.5	55.8	60.1	52.2	42.7	34.6	32.3	40.0
	S D	11.679	11.694	10.470	9.425	8.505	9.782	9.567	7.686	9.520	10.048	10.213	10.358	14.188
	TOTAL OBS	2401	2132	2310	2364	2495	2379	2492	2414	2334	2412	2288	2411	28432
15-17	MEAN	30.9	29.2	29.6	30.6	32.5	37.5	54.2	58.2	50.0	41.2	34.3	32.1	38.5
	S D	11.628	11.830	10.522	9.693	8.545	10.164	9.138	7.774	9.768	9.916	9.999	10.301	14.021
	TOTAL OBS	2400	2127	2311	2362	2494	2383	2495	2416	2336	2414	2285	2414	28437
18-20	MEAN	33.0	31.4	31.4	31.4	32.6	37.7	53.0	58.9	51.7	43.6	36.9	34.1	39.9
	S D	10.745	11.269	10.019	9.268	8.361	9.989	8.793	7.660	9.400	9.276	9.295	9.442	13.530
	TOTAL OBS	2397	2141	2311	2362	2497	2384	2488	2416	2334	2412	2290	2410	28442
21-23	MEAN	32.2	32.0	32.9	32.6	33.2	38.2	55.9	60.5	52.7	43.1	35.2	32.6	40.2
	S D	10.782	11.041	9.726	9.201	8.558	10.068	9.806	7.914	9.448	9.801	10.071	9.777	13.975
	TOTAL OBS	2391	2144	2312	2369	2494	2384	2495	2416	2338	2416	2291	2409	28459
ALL HOURS	MEAN	31.2	30.8	31.9	32.5	33.9	39.0	56.1	60.6	52.2	42.4	34.5	32.1	39.9
	S D	10.950	11.210	9.914	9.227	8.512	10.001	9.830	8.005	9.653	9.880	9.922	9.823	14.160
	TOTAL OBS	19187	17083	18500	18920	19962	19056	19796	19310	18655	19305	18321	19275	227402



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX

41-46, 51-72

ALL

STATION

STATION NAME

PERIOD

MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	ALL	99.7	92.0	78.8	63.4	48.5	35.5	23.4	13.0	4.4	51.4	19187
FEB		99.1	85.3	67.5	51.0	37.4	26.0	15.7	8.2	2.5	44.8	17084
MAR		97.9	79.0	58.7	40.8	26.9	17.4	10.2	5.0	1.3	39.2	18497
APR		95.9	66.5	40.3	22.4	11.1	6.0	3.3	1.5	.3	30.0	18919
MAY		90.8	49.1	21.0	8.6	3.5	1.5	.9	.4	.1	22.8	19962
JUN		88.1	43.1	16.5	5.0	1.9	.9	.4	.1		20.9	19055
JUL		97.8	76.0	49.2	27.3	14.7	7.5	4.0	1.6	.2	33.3	19799
AUG		99.6	90.9	69.2	46.1	28.4	15.8	8.2	3.2	.7	41.7	19308
SEP		99.1	83.1	59.3	37.4	21.7	11.5	5.7	2.3	.5	37.5	18684
OCT		99.3	84.5	62.9	41.7	23.9	12.9	6.7	3.4	.8	39.1	19303
NOV		99.2	88.8	71.1	53.1	36.5	22.6	13.1	5.6	1.7	44.7	19321
DEC		99.0	93.5	81.3	66.9	50.3	35.1	22.9	12.6	4.2	52.2	19274
TOTALS		97.2	77.6	56.3	38.6	25.4	16.1	9.5	4.7	1.4	39.1	227393

1

2 10

JAN  
MONTH

1

;

54

DATA PROCESSING BRANCH  
BTAC/USAF  
AIR WEATHER SERVICE/MAC

## RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-46,52-72

PERIOD

FEB  
MONTH

### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
FEB	00-02	100.0	97.0	84.2	69.4	54.3	37.4	22.2	12.5	4.1	53.6	2135
	03-05	100.0	98.5	90.1	76.8	62.8	46.9	28.1	15.6	5.2	58.0	2156
	06-08	100.0	98.7	92.8	78.7	66.1	51.2	31.9	16.8	5.2	59.7	2136
	09-11	99.9	90.2	69.1	49.2	32.8	20.3	11.2	4.7	.9	43.4	2134
	12-14	97.6	60.0	41.3	22.4	12.2	7.4	4.1	2.1	.6	31.0	2132
	15-17	95.6	56.3	29.2	15.9	8.6	5.3	4.2	1.8	.7	27.1	2127
	18-20	99.3	80.1	55.0	35.0	20.3	12.6	7.6	3.6	.7	37.0	2140
	21-23	99.9	93.8	78.6	60.3	42.4	25.7	16.1	8.5	2.2	48.4	2144
TOTALS		99.1	85.3	67.5	51.0	37.4	26.0	15.7	8.2	2.5	44.8	17084

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-45, 52-72  
PERIOD

MAR  
MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	00-02	100.0	95.5	79.8	57.5	38.5	25.6	15.2	7.9	1.9	47.8	2313
	03-05	100.0	97.4	88.6	69.5	49.8	33.1	20.4	10.5	3.4	52.9	2311
	06-08	100.0	97.5	89.9	74.2	53.2	35.8	20.6	10.1	3.0	54.0	2316
	09-11	99.1	83.5	57.2	36.4	20.9	11.6	6.7	2.4	.6	37.2	2316
	12-14	95.8	59.0	31.1	16.2	8.8	5.2	2.6	1.0	.1	27.4	2309
	15-17	91.0	42.9	20.8	10.3	6.0	3.6	2.1	1.3	.1	23.1	2310
	18-20	97.5	66.4	33.7	19.6	11.8	7.5	4.7	2.1	.5	30.0	2311
	21-23	99.7	90.0	66.4	42.4	25.8	16.6	9.3	4.8	1.0	41.0	2311
TOTALS		97.9	79.0	58.7	40.8	26.9	17.4	10.2	5.0	1.3	39.2	18497

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/XAC

## RELATIVE HUMIDITY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46,51-72

PERIOD

APR  
MONTH

### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
APR	00-02	99.9	89.0	58.5	31.5	14.3	8.6	4.9	2.6	.4	36.5	2366
	03-05	99.9	95.7	76.3	48.7	25.3	13.1	7.3	3.3	.7	42.5	2366
	06-08	100.0	93.6	75.9	49.0	24.6	12.6	6.2	2.7	.6	42.1	2365
	09-11	98.5	67.6	34.7	15.0	6.6	2.8	1.2	.5	.0	28.2	2366
	12-14	92.4	40.2	14.1	5.2	2.5	1.6	.9	.4	.0	20.9	2364
	15-17	83.3	25.3	8.0	4.1	2.7	1.7	.9	.5		17.8	2362
	18-20	93.5	42.6	15.8	7.7	4.3	2.6	1.4	.7	.1	22.1	2361
	21-23	99.3	75.9	38.9	17.6	8.2	5.0	3.2	1.2	.3	30.2	2369
TOTALS		95.9	66.5	40.3	22.4	11.1	6.0	3.3	1.5	.3	30.0	18919

USAFETAC

FORM 8-64

0-87-5 (OL A)

## RELATIVE HUMIDITY

MAY  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	00-02	99.4	69.9	29.6	12.2	5.2	2.2	1.5	.8	.1	27.5	2499
	03-05	99.8	87.4	51.1	23.0	9.0	3.6	2.1	1.1	.1	33.3	2499
	06-08	99.7	84.2	49.0	20.7	7.5	2.7	1.6	.6	.1	32.3	2493
	09-11	96.7	44.1	14.0	4.0	1.4	.7	.4			21.6	2491
	12-14	82.0	20.1	3.9	1.0	.6	.4	.1			15.9	2495
	15-17	69.2	12.4	2.2	1.0	.6	.3	.1	.1		13.8	2494
	18-20	82.5	19.2	4.4	2.0	1.2	.7	.4	.2		16.1	2497
	21-23	97.1	49.1	14.0	5.1	2.3	1.5	1.0	.5	.1	22.1	2494
TOTALS		90.8	48.1	21.0	8.6	3.5	1.5	.9	.4	.1	22.8	19962

1

## 4 14

JUN  
MONTH

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUN	00-02	98.4	64.1	22.0	5.8	2.3	1.2	.6	.3		24.9	2383
	03-05	99.7	84.0	42.5	13.6	4.4	2.1	1.3	.4	.0	30.3	2382
	06-08	99.2	82.5	40.2	12.6	4.4	1.8	.8	.3	.0	29.6	2382
	09-11	93.9	38.9	10.3	2.6	1.1	.4	.1			20.2	2379
	12-14	78.6	15.0	3.5	.6	.3	.2	.0			15.1	2379
	15-17	64.4	7.2	2.3	.7	.3	.2	.1			12.7	2383
	18-20	76.3	13.4	2.9	1.2	.9	.4	.1			14.7	2384
	21-23	94.0	38.6	8.6	2.9	1.5	.7	.4	.0		20.0	2383
TOTALS		88.1	43.1	16.5	5.0	1.9	.9	.4	.1		20.9	19055

0-87-5 (OL A)

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111  
STATION

LUKE AFB ARIZONA/PHOENIX  
STATION NAME

42-46,51-72

PERIOD

JUL  
MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	00-02	99.6	88.7	66.8	38.6	21.8	12.2	6.6	2.9	.4	39.3	2441
	03-05	100.0	95.1	50.0	34.2	33.8	17.6	9.7	3.9	.7	45.1	2412
	06-08	99.9	95.2	80.5	55.9	31.8	15.3	8.0	2.6	.3	44.5	2490
	09-11	99.0	81.0	53.4	23.6	9.8	4.3	1.7	.7	.0	32.8	2483
	12-14	95.5	62.3	25.6	8.2	3.0	1.4	.6	.3	.0	25.1	2493
	15-17	92.4	46.1	13.9	3.7	1.7	.7	.4	.1		21.3	2495
	18-20	96.9	58.6	25.0	10.1	4.0	1.8	1.2	.7	.2	25.3	2489
	21-23	99.0	81.0	48.7	24.1	12.0	6.9	3.6	1.8	.2	33.2	2496
TOTALS		97.8	76.0	49.2	27.3	14.7	7.5	4.0	1.6	.2	33.3	19799



DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-46, 51-71  
PERIOD

AUG  
MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
AUG	00-02	100.0	98.3	89.3	66.3	42.5	24.9	13.7	5.6	1.1	49.6	2414
	03-05	100.0	99.4	94.6	81.7	59.4	35.8	20.0	8.1	1.5	55.6	2409
	06-08	100.0	99.3	95.2	81.7	59.4	33.7	17.6	6.4	.8	55.0	2409
	09-11	99.9	95.0	76.6	45.1	20.8	9.1	3.1	1.1	.7	40.7	2415
	12-14	99.2	83.6	47.3	17.4	5.8	2.8	1.1	.6	.1	31.4	2414
	15-17	98.5	71.8	28.5	8.6	3.6	1.6	.9	.4	.1	26.8	2416
	18-20	99.6	83.4	46.1	21.0	10.3	4.6	2.1	.8	.2	32.3	2416
	21-23	99.8	96.1	76.5	47.1	25.3	14.2	7.2	2.7	.7	42.5	2415
TOTALS		99.6	90.9	69.3	46.1	26.4	15.8	8.2	3.2	.7	41.7	19308

1

4 12

SEP  
MONTH

C

(

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

42-46,51-71  
PERIOD

OCT  
MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
OCT	00-02	100.0	98.2	86.7	61.1	36.2	18.5	10.0	5.1	1.0	47.1	2415
	03-05	100.0	98.9	94.0	74.8	47.6	26.4	13.2	6.8	1.7	51.9	2412
	06-08	99.9	98.4	92.9	75.5	48.6	27.4	13.6	6.7	1.9	52.1	2413
	09-11	99.5	89.5	53.4	27.2	13.8	7.1	3.7	2.1	.5	34.8	2410
	12-14	98.2	60.5	24.6	11.5	5.5	2.8	1.2	.7	.2	26.0	2411
	15-17	97.1	49.4	17.8	8.5	4.2	2.5	1.4	.7	.1	23.5	2414
	18-20	99.7	88.1	53.6	23.0	9.9	5.9	3.5	1.6	.4	34.1	2412
	21-23	99.9	97.2	80.5	51.8	25.5	12.6	7.1	3.7	.5	43.4	2416
TOTALS		99.3	84.5	62.9	41.7	23.9	12.9	6.7	3.4	.8	39.1	19303

## RELATIVE HUMIDITY

NOV  
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	00-02	99.9	97.8	89.2	72.6	51.4	31.4	19.3	7.8	2.7	52.7	2293
	03-05	100.0	98.3	92.7	80.1	60.9	41.6	24.4	11.3	3.4	56.9	2291
	06-08	100.0	98.4	93.3	81.1	63.7	44.2	26.4	11.5	4.0	57.9	2291
	09-11	99.2	89.1	63.9	43.4	26.7	14.8	7.5	3.0	1.0	40.4	2292
	12-14	97.3	65.1	36.5	19.1	10.4	5.2	2.8	1.2	.4	29.7	2288
	15-17	97.5	65.0	30.5	15.8	8.7	3.9	2.5	1.3	.3	27.9	2285
	18-20	99.7	93.4	75.5	46.6	25.6	14.0	6.8	2.5	.5	42.1	2290
	21-23	99.9	95.9	87.4	66.0	44.3	26.0	14.8	6.1	1.5	49.7	2291
TOTALS		99.2	88.8	71.1	53.1	36.5	22.6	13.1	5.6	1.7	44.7	18321

DATA PROCESSING BRANCH  
ETAC/USAF  
AIR WEATHER SERVICE/MAC

# RELATIVE HUMIDITY

23111 LUKE AFB ARIZONA/PHOENIX  
STATION STATION NAME

41-45, 51-71  
PERIOD

DEC  
MONTH

## CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	00-02	100.0	98.8	95.3	85.6	66.0	45.9	30.9	18.5	6.1	60.4	2404
	03-05	100.0	99.5	97.2	90.7	76.3	55.0	37.0	21.9	8.5	64.3	2405
	06-08	100.0	99.5	97.6	91.7	80.6	61.3	41.3	24.7	8.7	66.2	2412
	09-11	99.7	95.6	81.2	62.6	44.3	29.9	18.9	8.2	2.4	49.8	2409
	12-14	98.7	81.1	52.5	32.3	20.0	11.7	6.8	3.0	.7	36.2	2411
	15-17	98.5	77.9	47.3	27.2	16.1	10.0	6.4	2.9	.9	34.2	2414
	18-20	100.0	97.1	86.7	64.8	41.3	26.9	15.0	7.0	2.2	49.7	2410
	21-23	100.0	98.3	92.9	80.0	57.9	39.8	26.6	14.7	4.3	57.1	2409
TOTALS		99.6	93.5	81.3	66.9	50.3	35.1	22.9	12.6	4.2	52.2	19274

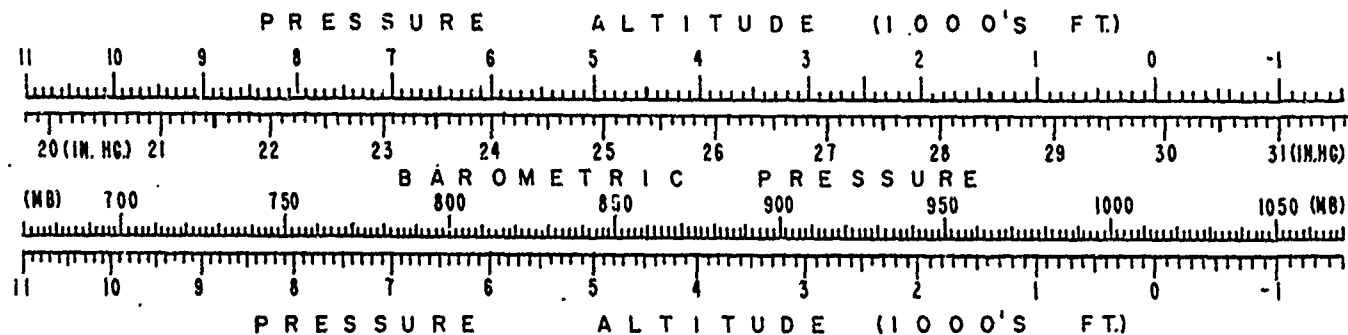
DATA PROCESSING DIVISION  
ETAC/USAF  
AIR WEATHER SERVICE (MAC)  
ASHEVILLE, NORTH CAROLINA

## PART F PRESSURE SUMMARY

Presented in this part are two tables giving the means, standard deviations, and total number of observations of station pressure and sea-level pressure by month and annual for the local hourly observations corresponding to the eight 3-hourly synoptic times GCT. The same computations are also provided at the bottom of the page for all hours combined. All years of data available are combined in both of these tables, although the overall period is limited to January 1946 through December 1963 because of changes in reporting practices before and after those dates.

1. Station pressure in inches of mercury.
2. Sea-level pressure in millibars.

Provided below is a scale to convert station pressure values in inches of mercury or millibars to pressure altitude in 1000's of feet. This scale is an enlarged model of the pressure altitude scale in the Smithsonian Meteorological Tables.



DATA PROCESSING BRANCH  
USAF ETAC  
AIR WEATHER SERVICE/MAC

## MEANS AND STANDARD DEVIATIONS

STATION PRESSURE IN INCHES HG FROM HOURLY OBSERVATIONS

23111 LUKE AFB ARIZONA/PHOENIX

46,51-63,65-72

STATION		STATION NAME												YEARS											
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL											
02	MEAN	28,887	28,845	28,775	28,714	28,661	28,611	28,666	28,682	28,661	28,741	28,841	28,881	28,745											
	S D	.129	.122	.122	.095	.084	.070	.071	.065	.074	.105	.115	.139	.137											
	TOTAL OBS	613	541	584	606	648	614	618	651	620	650	615	618	7388											
05	MEAN	28,885	28,840	28,773	28,720	28,678	28,632	28,687	28,694	28,673	28,747	28,841	28,880	28,753											
	S D	.128	.123	.123	.094	.083	.075	.066	.062	.074	.106	.116	.140	.132											
	TOTAL OBS	616	541	583	606	646	614	623	650	629	650	615	619	7392											
08	MEAN	28,915	28,875	28,815	28,768	28,723	28,681	28,733	28,737	28,716	28,787	28,877	28,911	28,793											
	S D	.131	.124	.127	.097	.085	.069	.062	.060	.074	.108	.117	.143	.129											
	TOTAL OBS	617	542	587	603	645	616	644	649	629	648	615	618	7413											
11	MEAN	28,945	28,897	28,828	28,772	28,718	28,674	28,728	28,735	28,719	28,794	28,891	28,936	28,801											
	S D	.129	.123	.123	.097	.086	.070	.061	.059	.074	.106	.115	.141	.136											
	TOTAL OBS	617	540	587	605	645	614	641	649	629	651	614	617	7409											
14	MEAN	28,867	28,827	28,768	28,716	28,666	28,623	28,671	28,681	28,659	28,726	28,818	28,859	28,738											
	S D	.124	.119	.119	.097	.085	.071	.062	.061	.076	.103	.111	.137	.128											
	TOTAL OBS	616	541	582	605	647	614	647	651	629	650	612	619	7412											
17	MEAN	28,846	28,792	28,720	28,661	28,608	28,563	28,598	28,614	28,608	28,692	28,795	28,840	28,692											
	S D	.122	.118	.117	.099	.086	.072	.062	.064	.077	.103	.109	.134	.139											
	TOTAL OBS	614	539	581	604	642	617	643	650	628	651	611	617	7397											
20	MEAN	28,863	28,807	28,734	28,666	28,612	28,560	28,604	28,624	28,615	28,707	28,814	28,859	28,703											
	S D	.124	.119	.117	.100	.086	.073	.070	.068	.078	.104	.112	.134	.144											
	TOTAL OBS	616	545	583	605	646	614	646	651	628	650	619	618	7412											
23	MEAN	28,888	28,834	28,767	28,705	28,652	28,603	28,657	28,672	28,651	28,737	28,840	28,882	28,733											
	S D	.127	.121	.118	.096	.083	.071	.073	.070	.077	.104	.114	.136	.139											
	TOTAL OBS	610	545	585	607	646	615	647	649	620	651	613	617	7415											
ALL HOURS	MEAN	28,887	28,840	28,772	28,715	28,665	28,618	28,668	28,680	28,663	28,741	28,840	28,881	28,745											
	S D	.130	.125	.125	.104	.093	.083	.081	.077	.084	.110	.118	.141	.140											
	TOTAL OBS	4919	4334	4672	4841	5165	4918	5109	5200	5032	5201	4908	4943	59242											

DATA PROCESSING BRANCH  
USAF ETAC/  
AIR WEATHER SERVICE/MAC

## MEANS AND STANDARD DEVIATIONS

SEA LEVEL PRESSURE IN MBS FROM HOURLY OBSERVATIONS

23:11 LUKE AFB ARIZONA/PHOENIX

42-46,51-72

STATION		STATION NAME												YEARS	
HRS (L/T)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
02	MEAN	1018.2	1016.3	1013.9	1011.2	1009.0	1006.9	1008.6	1009.1	1008.7	1012.1	1016.0	1017.9	1012.2	
	S D	4.636	4.539	4.425	3.535	2.933	2.535	2.470	2.442	2.661	3.688	4.134	4.859	5.301	
	TOTAL OBS	780	711	770	788	834	795	803	806	780	804	765	773	9409	
05	MEAN	1018.2	1016.3	1013.8	1011.5	1009.7	1007.8	1009.4	1009.6	1009.2	1012.4	1016.2	1017.9	1012.6	
	S D	4.584	4.559	4.440	3.505	2.882	2.475	2.294	2.287	2.599	3.702	4.188	4.891	5.072	
	TOTAL OBS	783	711	769	789	832	794	802	805	779	805	765	774	9408	
08	MEAN	1019.4	1017.7	1015.4	1013.2	1011.3	1009.4	1011.0	1011.1	1010.8	1014.0	1017.7	1019.2	1014.1	
	S D	4.708	4.991	4.556	3.546	2.908	2.451	2.144	2.213	2.577	3.750	4.214	4.986	5.026	
	TOTAL OBS	784	711	772	786	830	796	829	804	779	803	765	772	9431	
11	MEAN	1020.3	1018.3	1015.7	1013.2	1011.0	1009.1	1010.7	1011.1	1010.7	1014.0	1017.8	1019.8	1014.2	
	S D	4.616	4.514	4.401	3.515	2.941	2.485	2.147	2.257	2.601	3.686	4.128	4.909	5.227	
	TOTAL OBS	784	710	772	789	830	795	828	804	778	806	744	771	9431	
14	MEAN	1017.4	1015.7	1013.5	1011.2	1009.1	1007.3	1008.6	1009.0	1008.5	1011.5	1015.2	1017.1	1011.9	
	S D	4.444	4.367	4.291	3.547	2.988	2.565	2.245	2.387	2.735	3.553	3.961	4.753	4.974	
	TOTAL OBS	765	709	767	787	833	794	833	805	779	805	762	774	9433	
17	MEAN	1016.8	1014.6	1012.0	1009.5	1007.3	1005.3	1006.2	1006.7	1006.8	1010.4	1014.5	1016.5	1010.5	
	S D	4.380	4.307	4.194	3.578	3.000	2.580	2.250	2.444	2.757	3.622	3.903	4.665	5.366	
	TOTAL OBS	781	709	769	787	829	797	829	805	778	806	761	772	9421	
20	MEAN	1017.6	1015.5	1012.7	1009.8	1007.4	1005.2	1006.5	1007.2	1007.3	1011.2	1015.4	1017.4	1011.0	
	S D	4.455	4.367	4.200	3.619	2.997	2.584	2.461	2.563	2.776	3.665	3.983	4.692	5.603	
	TOTAL OBS	783	715	769	788	832	794	831	806	778	804	762	773	9435	
23	MEAN	1018.3	1016.1	1013.6	1011.0	1008.7	1006.6	1008.3	1008.8	1008.4	1012.0	1016.1	1018.1	1012.1	
	S D	4.548	4.495	4.302	3.545	2.928	2.519	2.583	2.606	2.713	3.654	4.074	4.743	5.386	
	TOTAL OBS	777	714	771	790	832	794	833	804	779	806	763	772	9432	
ALL HOURS	MEAN	1018.3	1016.3	1013.8	1011.3	1009.2	1007.2	1008.7	1009.1	1008.8	1012.2	1016.1	1018.0	1012.3	
	S D	4.563	4.605	4.501	3.768	3.249	2.907	2.834	2.827	2.990	3.850	4.212	4.915	5.393	
	TOTAL OBS	6257	5691	6147	6504	6652	6359	6588	6439	6230	6439	6107	6181	75403	